

University of Connecticut

Building College Community Through User Experience Design

Jillian Milton

Honors Thesis in Digital Media and Design (Web Design Concentration)

Thesis Supervisor: Professor Brian Daley

Honors Advisor: Dr. Tom Scheinfeldt

May 10, 2024

Acknowledgements

I want to thank the following people for making this senior thesis successful and always believing in me.

Brian Daley, Professor of Web Development, Thesis Supervisor

Thank you for assisting me with the coding of *Gated* and giving me feedback on my designs and the paper. After taking four courses with you, I thought I won the lottery when you agreed to advise my work! I have learned so much from you. You were there with me every step of the way, and I have thoroughly enjoyed working with you. I am so grateful.

Kathleen McLaughlin, Professor of Statistics

Thank you for helping me create and distribute two surveys that shaped the app's features. The User Research and Data Analysis section of the project went so smoothly. I felt such confidence in the results because of your support. With your help, I reached 320 participants across the two surveys. I feel validated for having advocated to be in your class. Even though I was one of many students in a large lecture class, I was lucky to forge a special relationship with you. You are a champion for accessibility!

Table of Contents

Section 1: Abstract.....	4
Section 2: Introduction	5
Section 3: Audit of Apps Used by College Students.....	6
Social Needs	7
Academic Needs	13
Informational Needs	18
Section 4: User Research and Data Analysis	22
College App Usage Survey I - Results.....	22
College App Usage Survey II - Results.....	29
Section 5: Designing to Address Needs and Dissatisfactions.....	40
Addressing Current Academic Needs	41
Addressing Future Academic Needs	44
Addressing Social Needs	48
User Personas	51
Section 6: Creative Choices	55
Section 7: Final Designs and Prototyping	61
Onboarding Screens	62
Home Screens	68
Search People Feature	70
Search Courses Feature	73
My Courses Feature.....	77
Chat Feature	78
Recognition Wall Feature	81
Section 8: Coding the App.....	83
Section 9: Conclusion.....	88
Works Cited	95
Appendix 1: HuskyLink Website Review.....	98
Appendix 2: Survey I Questions	100
Appendix 3: Survey I Results.....	110
Appendix 4: Survey II Questions	117
Appendix 5: Survey II Results.....	128

Section 1: Abstract

This senior thesis aims to demonstrate how effective user experience design can help build community among college students. An app audit was conducted to observe how college students meet their needs in various areas, such as social, academic, and informational. Based on the audit, a survey was developed and distributed. Of the 301 respondents, 66% of UConn students expressed interest in an app to address their academic needs over their social needs. The survey asked about students' existing app usage and dissatisfaction with those apps. An original app, *Gated*, was designed with Figma to the prototype stage, and then coded with HTML, CSS, JavaScript, and a PostgreSQL database. *Gated*'s main features include searching for students based on major or course taken, creating group chats of students in a current class or who have previously taken a course, and searching for professor reviews. Students can also search for other students based on social filters like clubs, dorms, or hometowns. *Gated* is based upon a closed community model. Therefore UConn data has been pre-populated into the app to help create profiles, rate courses, and assist in searches. *Gated* addresses students' need for professor and course information and helps them find peers for guidance and mentorship to better inform their academic decisions.

Section 2: Introduction

Four years ago, in 2020, the world shut down due to the coronavirus (COVID) pandemic. Most of my peers had their senior year of high school cut short and spent their first year of college entirely online. Classes were on Zoom and WebEx. Students could still participate through chat, unmuting their microphones, and turning on their cameras, but it was different. Although schools returned to in-person learning in 2021, the world did not truly get back to a semblance of normal until the end of 2022. Those two years were filled with social isolation, which many believe worsened the loneliness epidemic. To this day, 1 in 3 people feel lonely once a week, and 1 in 10 people feel lonely every day (Thompson). By 2024, was it possible that people had forgotten how to interact with one another? Were they still recovering from the setbacks of COVID?

Socializing during COVID-19 was hard: it did not matter if a person was an extrovert or an introvert. Physiologically, it took more air to talk to someone who was six feet away than a person who was right next to them. Having long conversations in person while social distancing was difficult because air became trapped in the mask. Wearing masks also limited one's facial expressions and reduced social cues (Heaney). During Zoom meetings, one could not mentally manage to make eye contact with five people simultaneously. Virtual conference platforms only gave the illusion of eye contact and of the in-person world.

Anecdotal evidence from social media reinforced the message that we were experiencing an unraveling of our sense of community. For example, a *Reddit* post from September 2023 was titled “Why is it so hard to make friends” (Figure 2.1). An anonymous user explains that everyone is already in their clique, and the person is struggling with balancing academic and social life. Unfortunately, this was not the only expression of frustration on this platform and others. Many students turned to social media to solve problems like finding roommates or getting rides home. Students were grappling with how to use social media to make connections on campus.

The post-COVID climate had revealed that my generation, Gen Z, was acutely feeling the need to connect, belong, and be part of a community. An app with a good user experience design could help students connect by addressing the drawbacks of some of the other platforms.

My senior thesis focused on designing an app that would help solve this problem and forge genuine



Figure 2.1 UConn Reddit Post

connections between individuals. I hypothesized that college students were more socially isolated than before COVID-19 and that an app could facilitate in-person interactions. My project began with this premise; however, the reader will find that my research took me down a different path. Students did want to connect, but they wanted these connections to be centered upon academic interests. What follows is the journey that led me to design and develop *Gated*, a closed community academic-based app for UConn college students.

Section 3: Audit of Apps Used by College Students

Through my usage and observations of social media and various other apps, I developed a working hypothesis: an app can improve how students connect to meet their social needs. To develop a framework to test whether my hypothesis was truly a need for college students, I conducted secondary research of existing apps. I audited apps to observe how college students were using them and what needs they were expressing on these apps. From this audit, I segmented needs into five categories listed in Table 3.1.

Table 3.1: Apps Used by College Students Grouped by Need

Needs	Apps Used by College Students
Social	<i>Facebook, Instagram, Reddit, X (Twitter), SnapChat, UConncontact, Fizz, ZeeMee</i>
Academic	<i>Rate My Professor, Reddit, Discord, Slack</i>
Informational	<i>MyUConn, UConncontact, Dining Paws, Passio Go, X, Facebook, Instagram</i>
Internships and Jobs	<i>HuskyLink, LinkedIn</i>
Dating	<i>Tinder, Bumble, HER, Hinge, Grindr</i>

I chose not to focus on need segments that apps adequately addressed or were competitively crowded. UConn recently launched *HuskyLink* in 2023 to support students and alums with career connections (see Appendix 1). Since *HuskyLink* is a robust offering in this space, I chose not to focus on internship or job needs. In the same way, a plethora of dating apps serve the purpose of making romantic social connections. I decided to narrow the scope of my project to needs in three main areas: social, academic, and informational.

Social Needs

Entering college is a time of great transition. It is reasonable for students to actively try to meet new people and make friends. I observed incoming freshman using *Instagram* to attempt to find roommates. Roommate searches continued even after freshman year, as living situations can be dynamic for a variety of reasons. Roommate search posts continued to appear on the UConn *Instagram* page or *Facebook* pages.



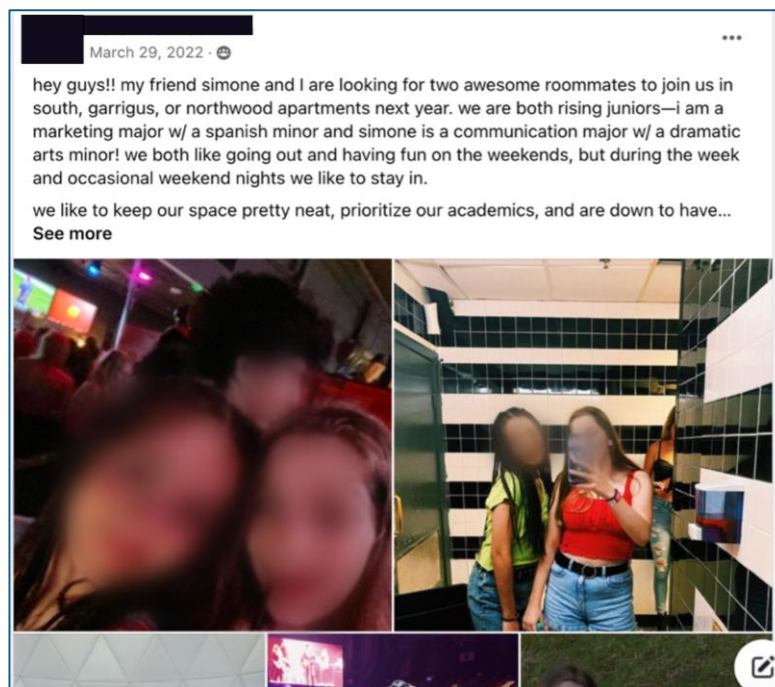


Figure 3.2: Facebook post by juniors looking for roommates

Students looking for friends and companionship also used *Reddit* to make anonymous posts, hoping someone would reach out to them. It is hard to gauge if a general open call for friendship was effective since the number of comments on these posts varied. It is impossible to know if these posters received private direct messages (DM's).

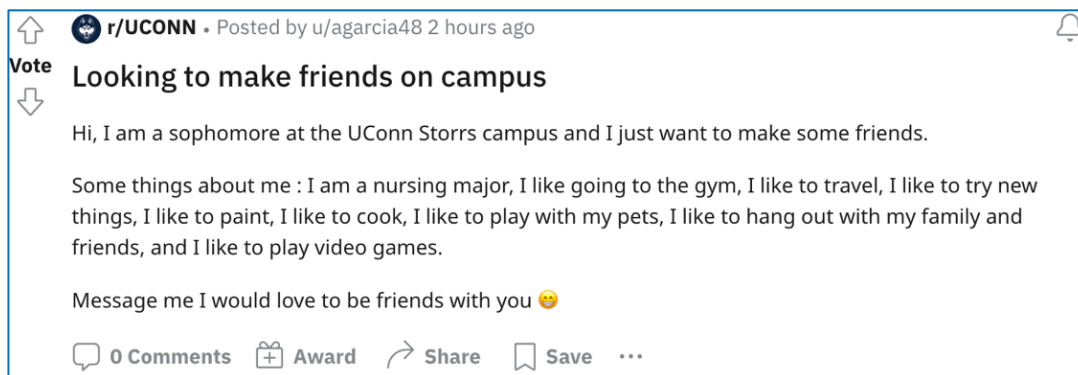


Figure 3.3: Sophomore student on *Reddit* posts details about her interests and asks if anyone would like to be friends (0 comments, used with permission)

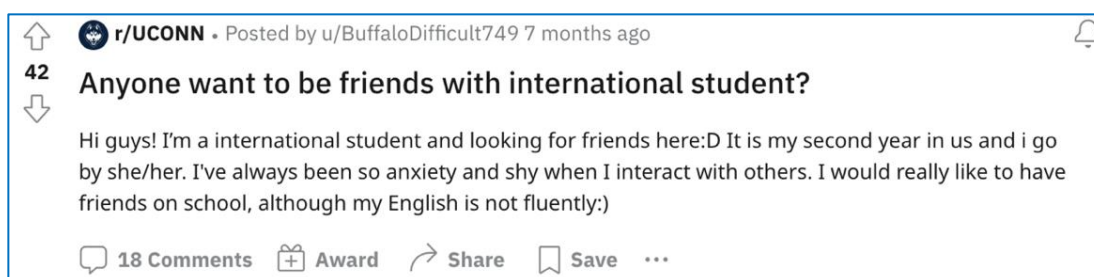


Figure 3.4: An international sophomore student inquires on *Reddit* if anyone would like to be friends (18 comments, used with permission)

Students sometimes tried to meet companions by forming a special interest group using a social media platform like the UConn *Facebook* page. While this page is a closed community, there is no expectation of privacy because admins cannot verify members' identities. These posts elicit more responses from potentially interested members.

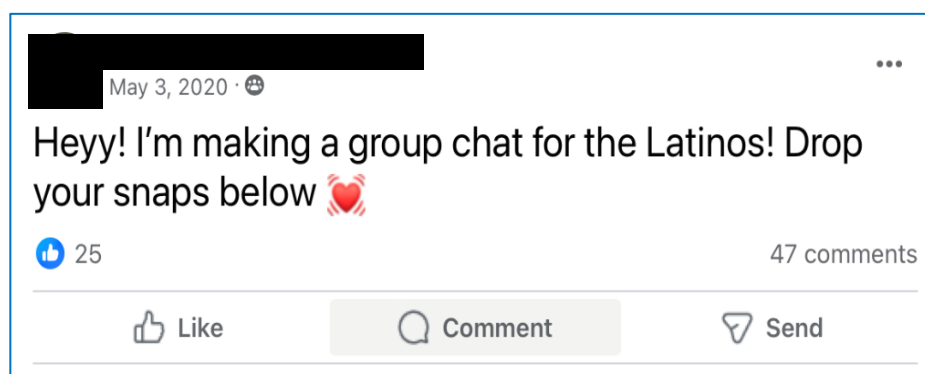


Figure 3.5: Facebook post by a student looking to make a group chat for a special interest group (25 likes, 47 comments)

A typical in-person method of making social connections is to join a club. UConn sponsors club fairs: however, if students miss those events, they can consult *UConncontact*, a directory-style web page with club descriptions and contact information. UConn students can find clubs, club sports, and fraternities and sororities. There is a search function, but the page has no engagement features. Each club page provides contact names for the club. Some clubs have meeting times and locations, while others appear inactive. The design lacks visual interest or notice of upcoming activities, making the user experience stagnant and unappealing ("*UConncontact* Home Page"). Some clubs provide *Discord* community information.

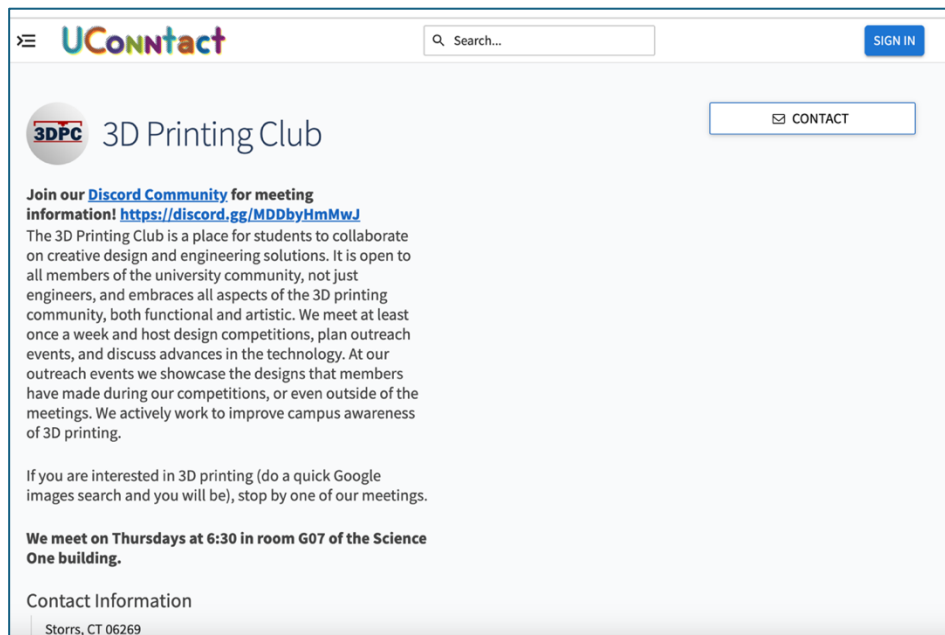


Figure 3.6: *UConncontact* provides club information for the 3D Printing Club

Although primarily used for gaming, the *Discord* app has some social and academic purposes. Clubs can use *Discord* to plan social events. For example, the UConn Table Top Gaming club and the Chamber Orchestra club have their own servers. These chats are used by members to plan club meetings, social events and fundraisers.

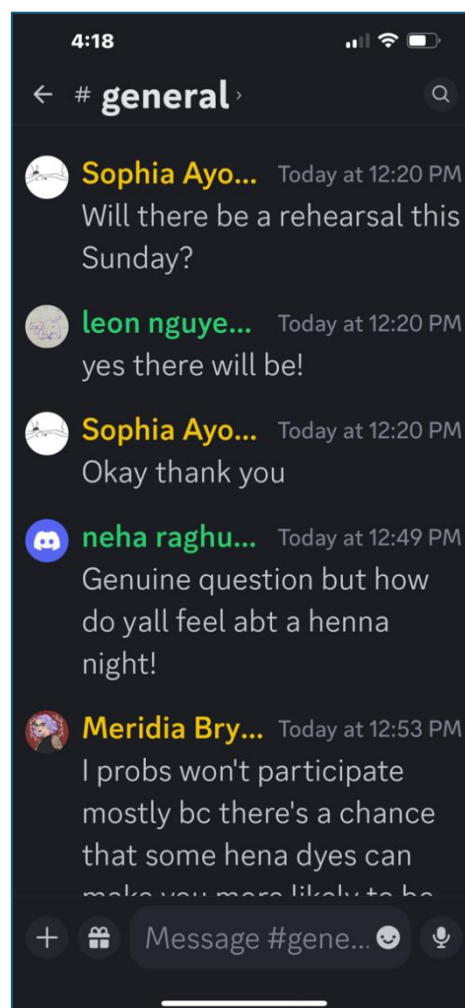


Figure 3.7: *Discord* conversation among students in chamber orchestra (used with permission)

Snapchat is a location-trackable photo and video-sharing app. UConn students most likely meet in person and ask for each other's accounts so that they can text or DM on *Snapchat*. Other social media, like *Instagram*, *Facebook*, and *X*, are probably used in the same way. Students will meet first and then exchange each other's account information as a way to stay in touch.

Unique Apps that Meet Social Needs for College Students

Two notable apps developed specifically to meet college students' social needs are *Fizz* and *ZeeMee*. These apps are relatively new and are not yet available on every college campus. They aim to foster conversation among college students. *Fizz* tries to create

conversation through privacy and anonymity, while *ZeeMee* tries to make friendship connections based on similar interests.

Fizz

Fizz was released in 2021 and is based in Palo Alto, California. Its founder, Teddy Solomon, dropped out of Stanford and invested 4.5 million dollars to start the app. *Fizz* is like *Reddit* for a closed college community. College students can only access their own college's page. Posting is anonymous; however, students can send direct messages to other students to reveal their identities.

Fizz is currently on 80 campuses and is slated to hit 250 by the end of 2023 (Silberling). At present, UConn does not have a *Fizz* community.

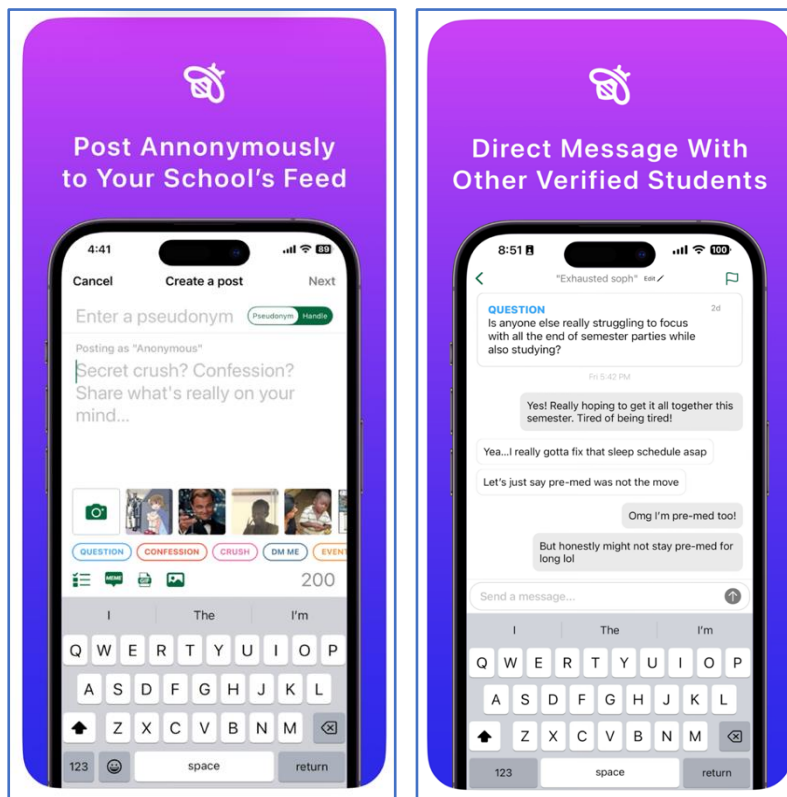


Figure 3.8: *Fizz* screenshots on the Apple App Store shows posting screen and DM feature

ZeeMee

ZeeMee was founded in 2014 by Adam Metcalf and is based in Redwood City, California. The app positions itself as a college recruiting and college transition tool. Students join while they are still in high school in order to meet college students from schools they are considering. *ZeeMee* claims that students who make friends and form meaningful relationships in the recruitment process with actual college students are more likely to apply to that college and attend ("*ZeeMee: The Best Social Media App...*").

The onboarding process asks students to disclose their intended major, where they are from, and conversation topics that interest them. Students can choose up to 20 categories or hobbies that interest them. *ZeeMee* also asks students to answer fun icebreaker questions that show up on their profiles. Once the user's profile is completed, *ZeeMee* will provide a *Recommended Friends* results page based on their common interests. There is a group chat that helps students find roommates and friends in their classes. *ZeeMee* is not a closed college community, as its recruitment focus means it is open to high schoolers. *ZeeMee* is currently in about 250 college campuses

("Introducing ZeeMee Community"). There is a ZeeMee UConn group that students use actively.

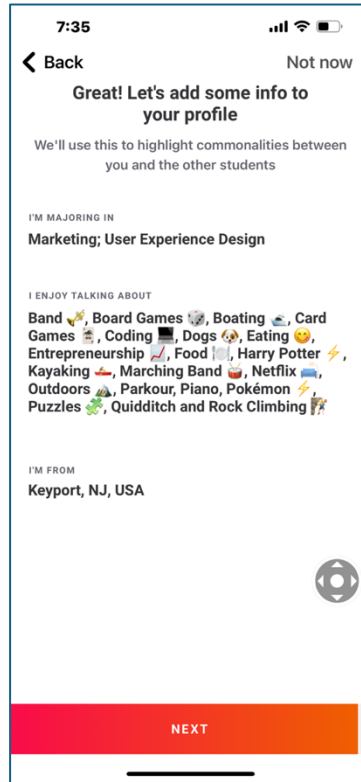
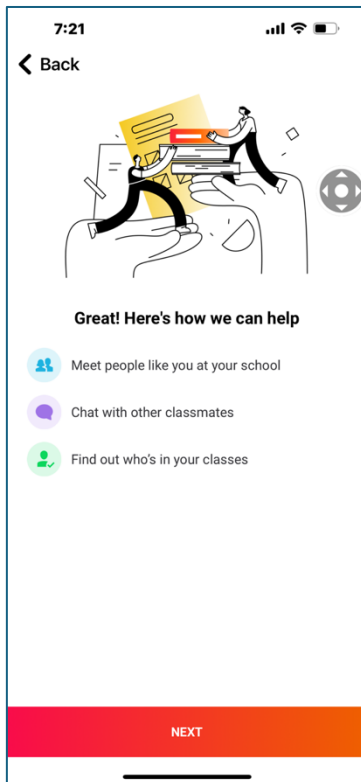


Figure 3.9: ZeeMee onboarding process asks students their intended major and topics of interests to create a profile

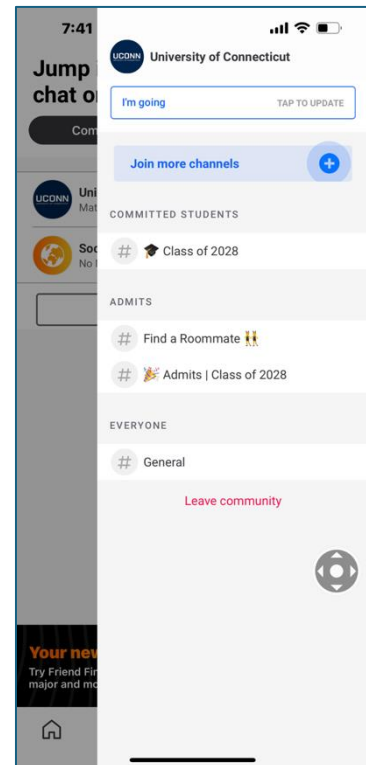


Figure 3.10: ZeeMee group chats for class year, roommate search, and admitted students

Academic Needs

Students entering college must make many decisions in a reasonably short amount of time. Academic decisions, like declaring a major, are usually made by spring of sophomore year or sooner. There are specific fields where students are accepted into a program that begins freshman year, such as engineering, pharmacy, digital media and design, or nursing. In certain fields, students may need to start picking a concentration within their major early to meet their graduation requirements.

Students find themselves looking for information to make a variety of decisions, such as:

- Meeting core content/ general education requirements
- Picking a major
- Adding a major or minor
- Changing a major
- Picking a concentration within a major
- Developing a course sequence plan
- Picking courses
- Meeting honors requirements
- Obtaining course materials

A student's main resource for deciding on a major and/or minor is their academic advisor. Some majors/ minors are complementary, while others are entirely unrelated. Access to advising may be more difficult when adding a major or minor outside of the student's existing department. About 75% of college students will change their major at least once during their college career (Sun). The natural exploration process may explain changing majors, but it can also be due to insufficient information or research about the new field at the outset.

For example, when considering an introductory course in Communications, the course catalog reads: "A study of modern communication theories and principles useful in understanding how people affect and are affected by others through communication."

The screenshot displays the UConn Academic Catalog website. At the top, the UCONN logo is on the left, and a search bar is on the right. Below the logo, the text "Academic Catalog" is prominent, followed by navigation links for "COURSES", "PROGRAMS", and "A-Z INDEX". The main content area shows a breadcrumb trail: "Home > Undergraduate > Directory of Courses > Communication (COMM)". On the left, a sidebar lists various undergraduate resources, with "Undergraduate" selected. The main heading is "Communication (COMM)". Below it, the course "COMM 1000. The Process of Communication. (3 Credits)" is described as "A study of modern communication theories and principles useful in understanding how people affect and are affected by others through communication. CA 2." A "Print Options" button is visible. Further down, the "Content Areas: Social Science" are listed, and a link to "View Classes" is provided.

Figure 3.11: Course description from the course catalog for an introductory level Communications course (Academic Catalog: COMM 1000).

This is scant information for a student deciding whether or not to enter this field as a major. Course syllabi are not made available to indicate the type of content that will be studied, and there is no survey data from students who took the course indicating whether their peers found the course meaningful.

Even after students have made decisions regarding their future course of study, many questions remain about how to meet requirements efficiently. Students want information about professors, workload, course content, and teaching styles. Some students use *Facebook* or *Reddit* to post academic questions about certain professors or courses, and meet with very few responses. The general UConn *Reddit* community has about 24.5K members. However, it is hard to ascertain how active members are on the platform. Asking specific questions about a course is a shot in the dark at best. General academic questions seem to elicit more responses.

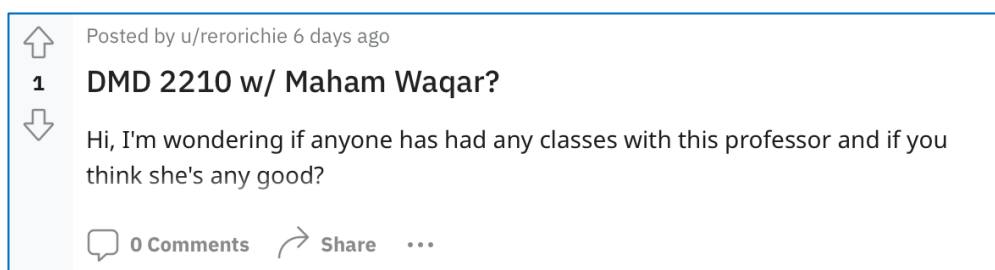


Figure 3.12: Student's *Reddit* post asks for other's opinion about a specific instructor and course and receives no comments (used with permission)

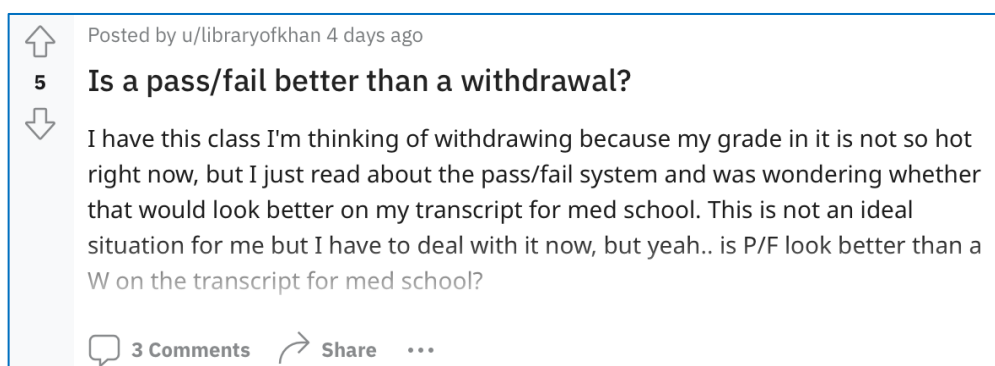


Figure 3.13: Student's *Reddit* post asks about academic strategy for grad school and receives 3 comments (used with permission)

A more systematic method to obtain professor and course information is the *Rate My Professor* website. *Rate My Professor* was created by a software engineer in Menlo Park, California (“Ratemyprofessors.com – Case Study”). It launched in 1999 and has now become one of the most widely recognized academic websites for university students. Students submit reviews on the site and the data is aggregated into an overall professor score and a course difficulty score. A bar chart displays the score distributions for the professor rating. There is also a metric for how likely someone is to take that professor’s class again. Students can leave comments anonymously, but the reader cannot verify if the reviewer is a real college student. There are adjectives at the bottom that describe each review. Examples include “caring,” “accessible outside of class,” and “tough grader.”

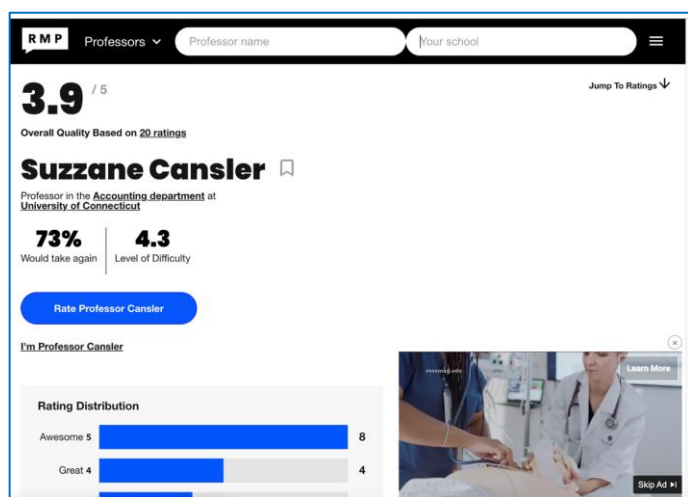


Figure 3.14: *Rate My Professor* search result for a UConn professor shows rating system

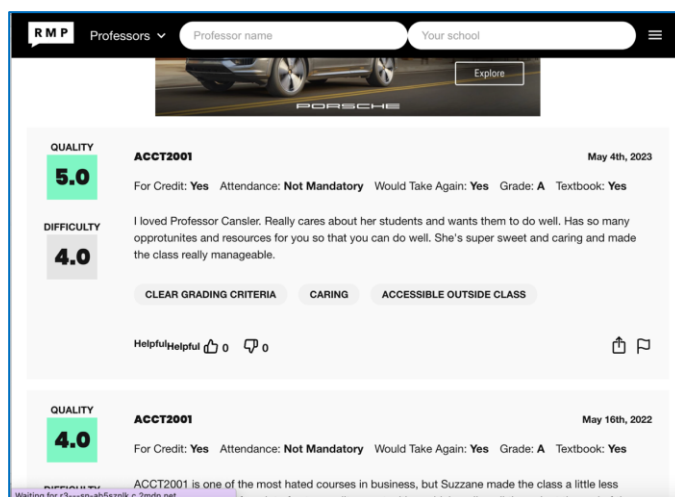


Figure 3.15: *Rate My Professor* search result for a UConn professor shows student comments

Information about professors and courses can be outdated or spotty. Information may exist for one professor in a particular class, but may not be available for another class that they teach. Reviews can also be divergent about the same professor and course leading the user to question the motives of the poster.

After students have made critical decisions about their plans of study, they must turn their focus to day-to-day concerns about doing well in a class. Students have present and pressing needs regarding:

- Understanding homework
- Studying for an exam
- Obtaining notes for a class they missed
- Clarifying class expectations or instructions
- Logistical information regarding exams or special class events

For these day-to-day concerns, students want to connect with other students in their class. In large lecture-style courses obtaining fellow classmate contact information is logistically difficult and inconvenient. In some instances, professors or teaching assistants set up a *GroupMe* chat or *Discord* channel in order to help their students, but this is not always the case.

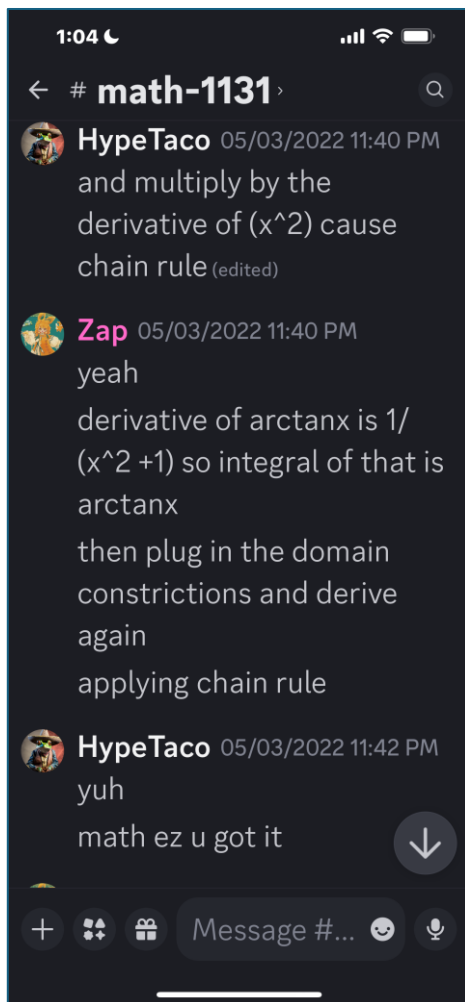


Figure 3.16: *Discord* conversation among students in a calculus course (used with permission)

One UConn *Discord* group chat, or server, is called FC. With over 1,200 members, STEM majors use FC to discuss classes, schedules, jobs, etc. Once joining, students can select their major and class year to gain access to that major's class group chats. For example, a computer science major would have access to all computer science course group chats. Students cannot tell if a person is currently enrolled in the class or has previously taken it, which makes asking questions difficult. Teaching assistants moderate group chats as one main concern is sharing homework answers. The group chats are not always active. Other *Discord* servers exist for different majors, such as business majors or students in the College of Liberal Arts and Sciences (CLAS).

UConn also has *Slack* workspaces for academic departments. The department will create *Slack* channels for every class in the major. Classmates can talk with one another, or direct message the professor, as shown in the figures below. Students cannot automatically create class group chats; the professor or students must add each

person individually. Another issue with *Slack* is that group chat messages go away after 90 days.

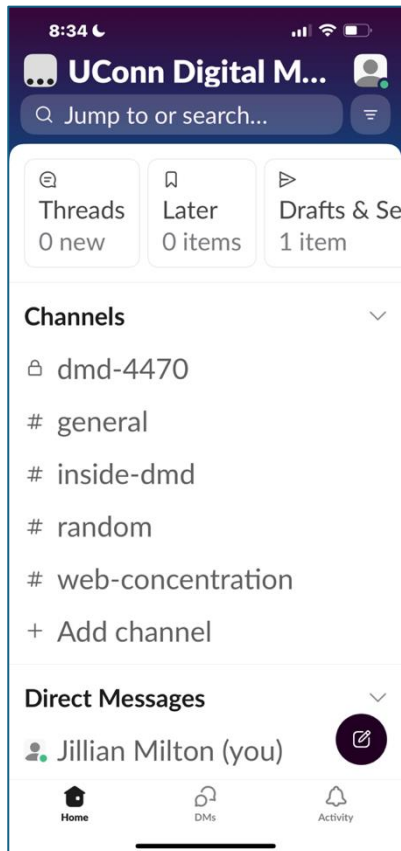


Figure 3.17: Slack home screen

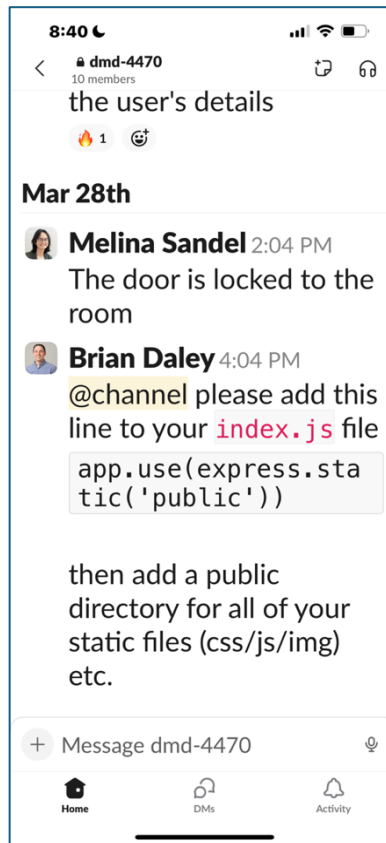


Figure 3.18: DMD 4470 group chat (used with permission)

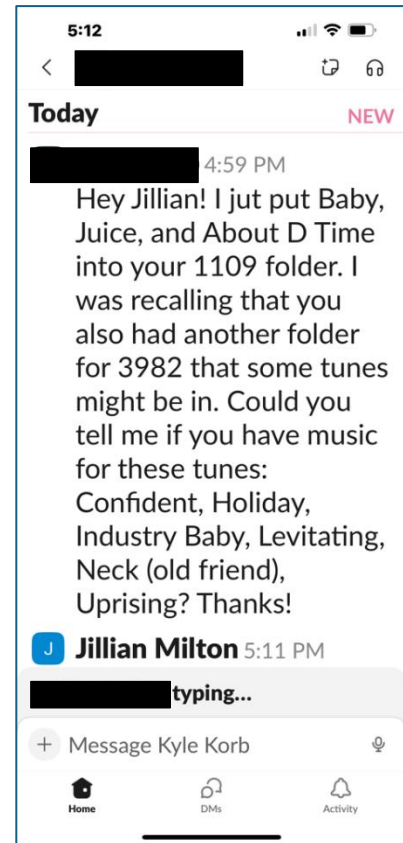


Figure 3.19: Direct Message (DM) on Slack

Informational Needs

Students are interested in events going on around campus. University Administrators promote athletic events and main-event type performances well. These announcements or advertisements, intended for large audiences, lend themselves well to public platforms, such as *Facebook*, *X (formerly Twitter)*, *Instagram*, and *YouTube*. Being in the know about smaller cultural events may require more intentional effort from students but these events can be found.

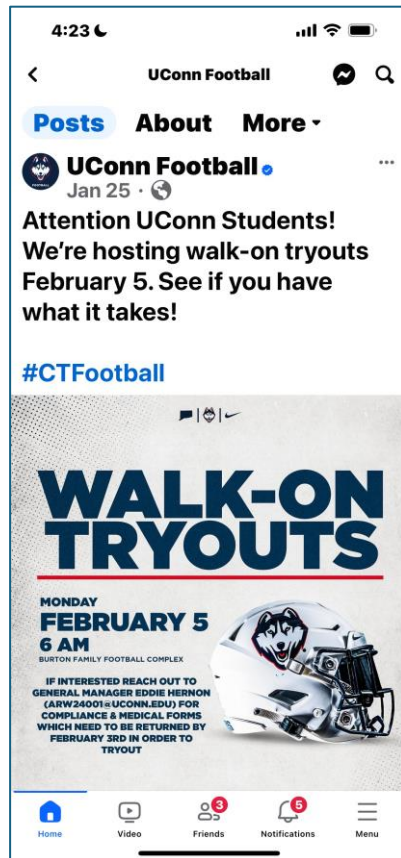


Figure 3.20: UConn Facebook post about trying out for the football team



Figure 3.21: UConn Instagram post advertising the 2024 Basketball Championship Rally.

UConn YouTube video about the School of Pharmacy can be found here:
<https://www.youtube.com/watch?v=vRDJSn6f-dY>

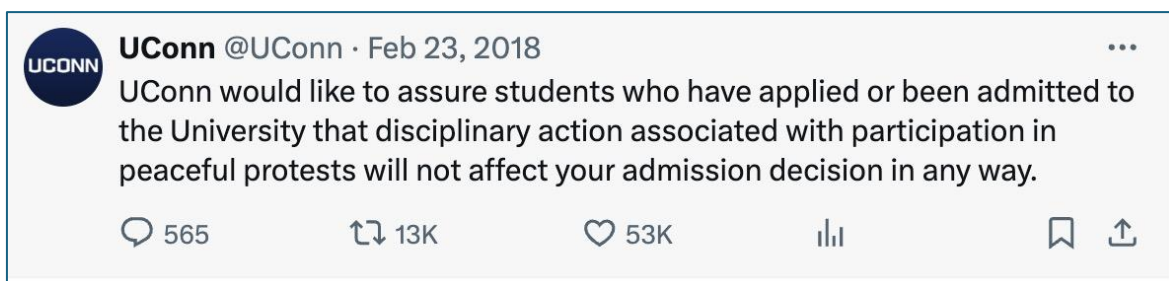


Figure 3.22: UConn X (formerly Twitter) post informing incoming freshmen about admissions.

Students can also use the *myUConn* app for information about parking, campus map and events, athletics, recreation, bus tracker, dining hall hours and menus, and other campus resources. The *myUConn* app is open to the public and can be used by students and visitors alike.

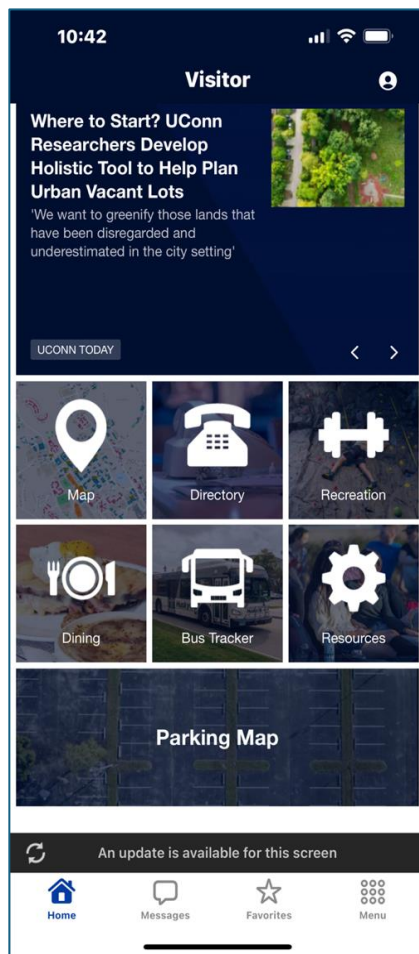


Figure 3.23: *myUConn* provides general university information

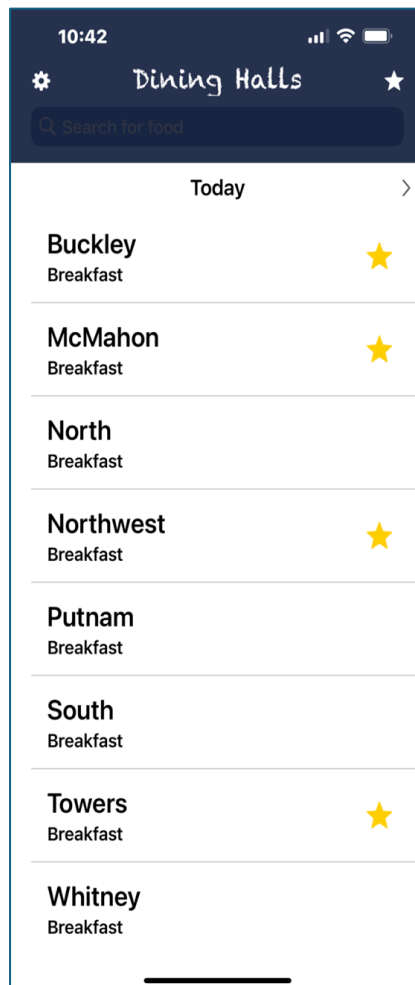


Figure 3.24: *Dining Paws* lists all dining halls

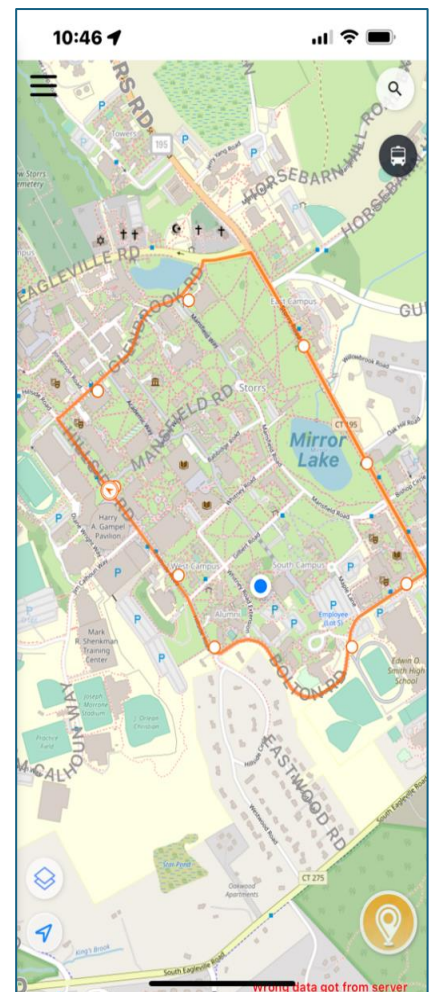


Figure 3.25: *Passio Go* shows UConn's orange line bus route

For information on dining, students use *Dining Paws*, an app that lists up-to-date dining hall menus at each of the university's dining halls. It contains no engagement features.

The *Passio Go* bus tracking app provides student passengers with up-to-the minute information on the location of their bus. UConn has about nine different bus routes with

different weekday and weekend schedules. These routes may be impacted by inclement weather or basketball detours. *Passio Go* helps students decide if they should wait for the bus or walk, or if they should change to a different bus route.

Daily information about dining, transportation, and campus events is a critical aspect of student life. Students rely heavily on these apps' accuracy for making daily plans about how to get to class, where to eat, and which recreational event to attend.

In conclusion, the audit of apps and websites used by UConn students helped me understand the needs that students are seeking to fulfill. Students tap into various apps and communities to try to answer their questions about social, academic, and informational needs.

Students used a scatter-shot approach to connect and meet their academic and information needs. A thoughtful student-centered app that applied user experience design principals could bridge the need gap. I wanted to understand better how UConn students specifically used apps to meet their social needs, and more importantly, if they were satisfied. Of the apps surveyed, many had their pro's and con's. In order to test my observations from the app audit and quantify the need, I conducted an online survey.

Section 4: User Research and Data Analysis

Research Process and Methods

My initial hypothesis was that an app could improve college students' social experience and support in person meetings with real students on campus. I reasoned that meeting people online could be the jumping-off point to personal live connections- similar to how dating apps function. Given this context, I wanted to quantify students' social needs and ascertain if their circumstances would create more significant social needs, such as living off campus, or transitioning to college as a freshman, transfer student, or international student. I chose to develop an online survey to get answers to these questions and test my hypothesis.

To avoid bias in the survey, students were asked about various needs they experience on campus. Needs were categorized into three main areas: social, academic, and informational. This allowed students to assess their needs and rank them within a context. It was also important to understand which apps students used to meet their various needs and how they felt about them. Did students' feel there were gaps or drawbacks in what these apps provided?

I was concerned about whether students would be willing to acknowledge and disclose having social needs in a survey. I discussed this with my statistics instructor, Professor McLaughlin, who suggested that I conduct an initial survey among a small sample size as a test. She also suggested creating a different question about social needs so that respondents had another opportunity to answer it. If we observed a drastic difference between the two questions, then we would know respondents were not comfortable answering the question truthfully.

College App Usage Survey I - Results

The initial test survey went out between 9/18/23 and 9/22/23 as a Google Form (See *College App Usage Survey I*, Appendix 2 and Appendix 3).

Twenty-two respondents completed the survey. The respondents were skewed female (17 females/ 5 males). Despite the small sample size, students from every undergraduate class year and students living on and off campus were represented.

Academic Needs

Students were asked to rank their academic needs. Among the five needs, the top two needs which were deemed most important were combined as follows:

1. Internships, research, and study abroad opportunities (13)

2. Receive student opinions about professors (12)
3. Find students in the same major or course (8)

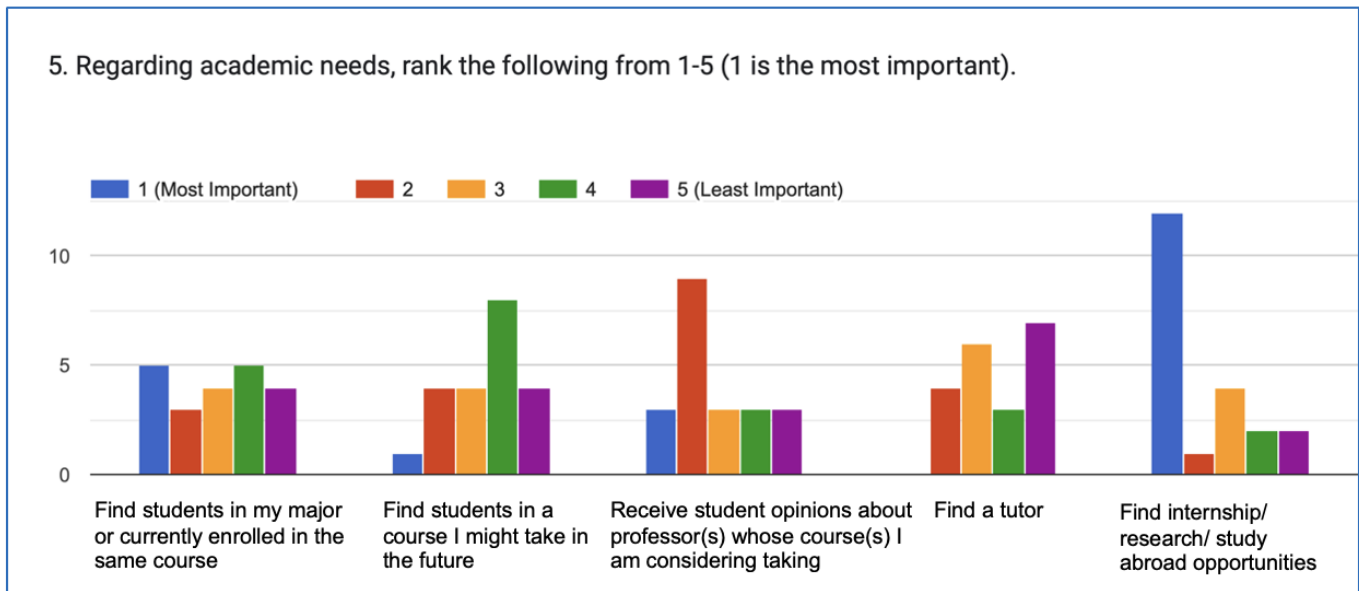


Figure 4.1: Survey I (Question #5) Rank academic needs

Since 13 out of 22 people ranked “Find internship, research and study abroad opportunities” as their number one need. I wanted to improve how this question was phrased in the next survey to understand what drove the interest. Was it internships, research, or study abroad opportunities? It was not within this project’s scope to be a job or internship-finding app. In addition, *Husky Link* had recently launched as a website with plans to launch a mobile app in the near future. *Husky Link* provided a robust and competent offering in the job/ internship space.

When students were asked which top three apps they used to meet their academic needs, almost all unanimously chose *Rate My Professor* (21), followed distantly by *Reddit* (12), *Instagram* (11), and *Snapchat* (10).

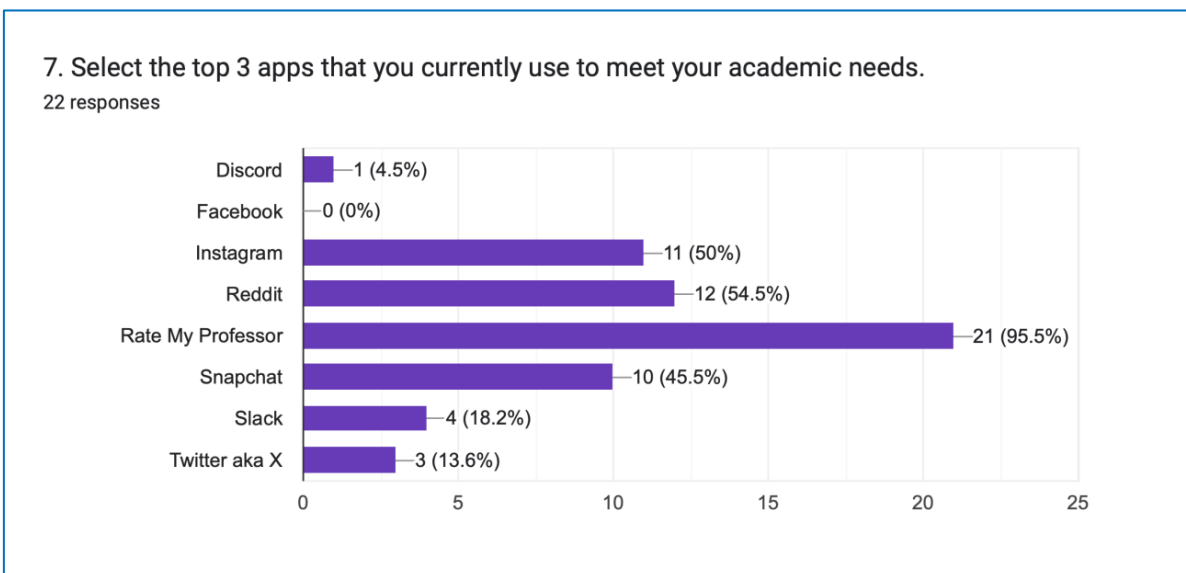


Figure 4.2: Survey I (Question #7) Apps used for academic needs

The second version of this survey would need a follow-up question to uncover user sentiment about these apps.

Social Needs

Two questions were asked using different approaches to assess social needs. Respondents were asked how they would describe themselves socially (Question #8).

8. Socially, which one of the following best describes you?

22 responses

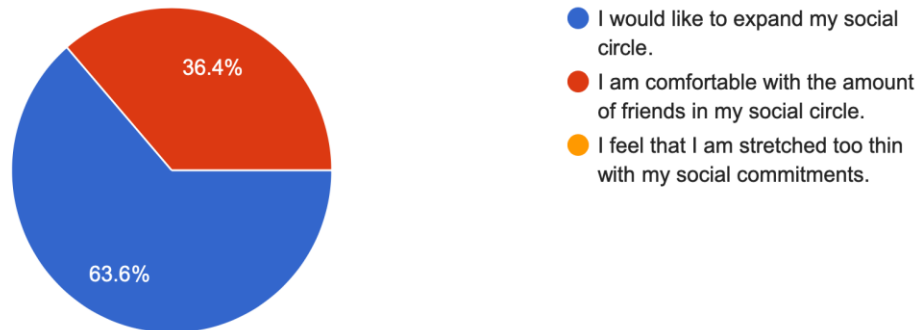


Figure 4.3: Survey I (Question #8) Provide social description

64% of students stated they wanted to “expand their social circle,” while 36% were comfortable with their social circle. No one claimed that they were overcommitted.

A secondary question was asked to probe students’ weekend plans to gauge social activity. This question also gave the option for an open-ended response.

16. Which statement best describes your weekends?

22 responses

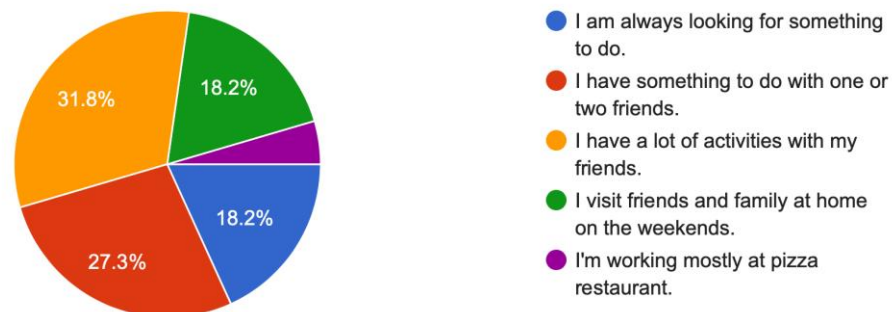


Figure 4.4: Survey I (Question #16) Describe your weekend

Based on responses to both of these questions, students appeared to be willing to admit having social gaps. According to Question #16, some students were “always

looking for something to do” (18%), some students had smaller social circles of “one or two friends” (27%), and the majority stated they had “a lot of activities” (32%). Despite most students saying that they made plans with friends and family in Question #16, two-thirds of respondents described themselves as open to expanding their social circle in Question #8. This question confirmed that students were responding honestly about their social needs. Question #16 would be eliminated in the final survey.

Students were asked to rank their social needs. Among five needs, the top two needs which were deemed most important were combined as follows:

1. Meet and find friends (18)
2. Find people in a club I am considering (10)
3. Find roommates (7)

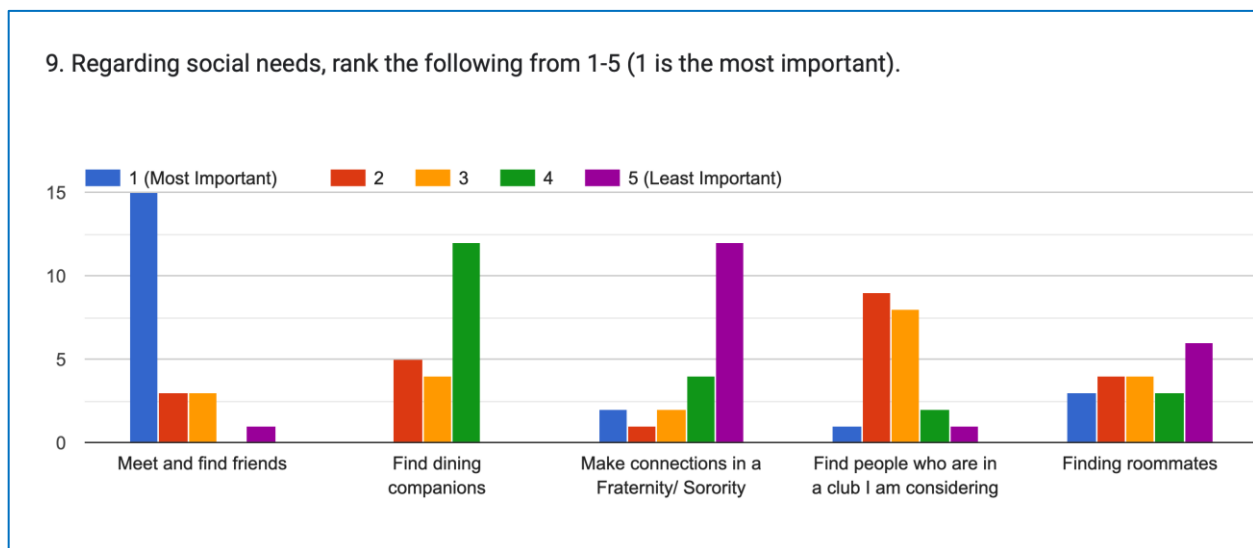


Figure 4.5: Survey I (Question #9) Rank social needs

Students were asked to name their top 3 apps for meeting social needs. Two apps that stood out for their high usage were *Instagram* (91%) and *Snapchat* (82%).

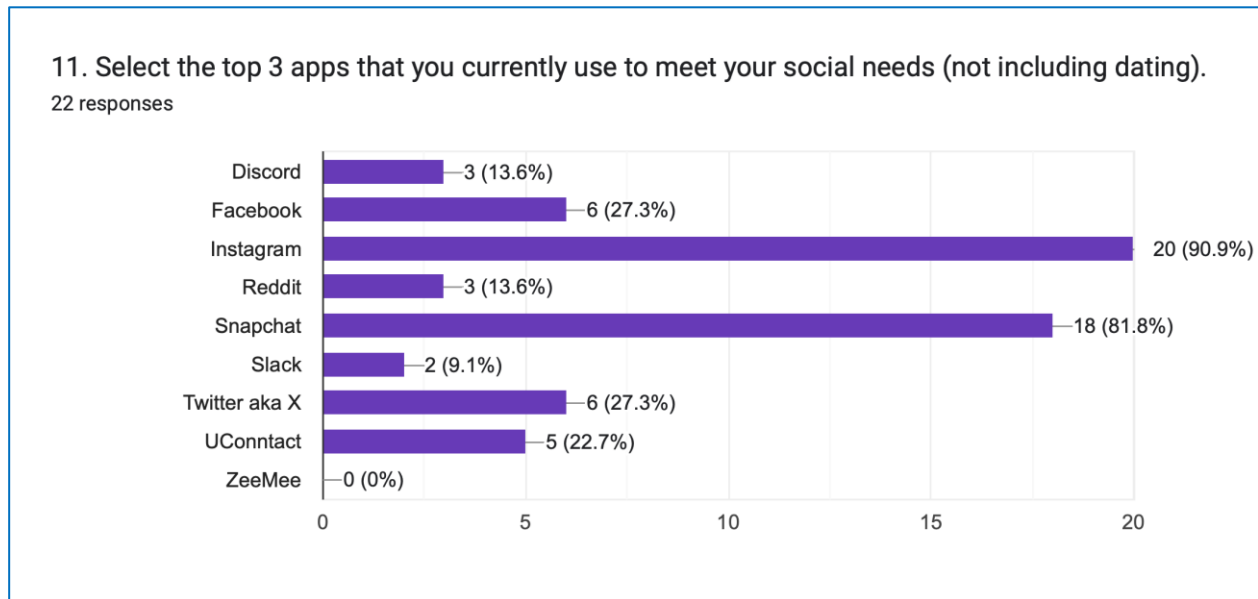


Figure 4.6: Survey I (Question #11) Apps used to meet social needs

Informational Needs

Students were asked to rank their informational needs. Among five needs, the top two needs that were deemed most important were combined as follows:

1. Events happening around campus (21)
2. Find a ride home (7)
3. Meeting students who live in a dorm/ residence I am considering or currently live in (6)
4. Dining hall and downtown Storrs dining recommendations (6)

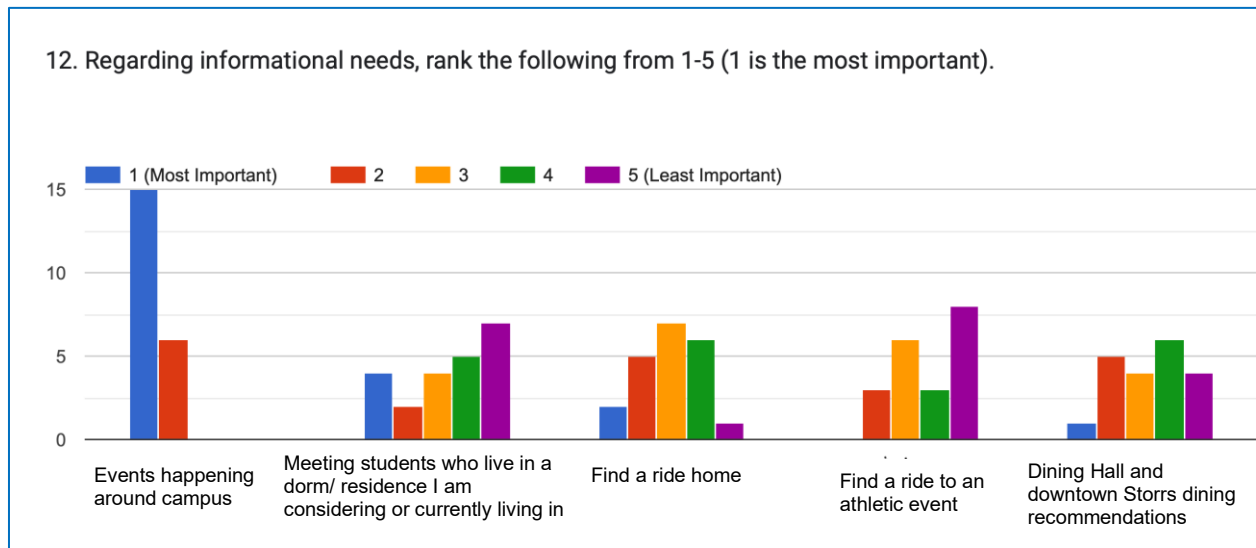


Figure 4.5: Survey I (Question #12) Rank informational needs

The apps students used for their informational needs were *Instagram* (64%), followed by *Dining Paws* (50%), and *MyUConn* (55%).

High percentages in UConn-specific apps indicate that students know these apps meet these unique needs on campus. The high use of *Instagram* may suggest that students do not only want the static, albeit timely, information offered in *Dining Paws* or *MyUConn*, but they may also want the ability to engage with other students about the information.

Ranking Academic, Social, and Informational Needs

After asking students about their needs in the three categories, the respondents were then asked to rank those needs. The majority of students (14) stated they wanted an app that met academic needs, with social needs (6) coming in second place.

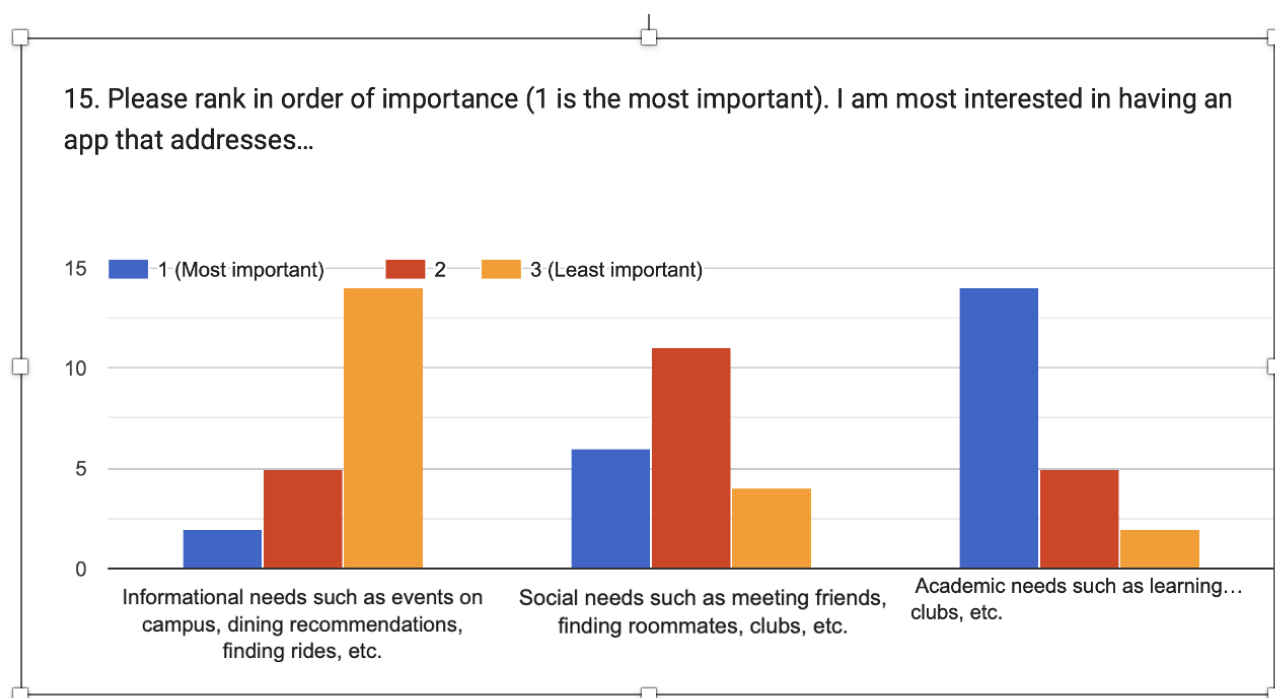


Figure 4.7: Survey I (Question #15) Rank your app needs: informational, social or academic

I was intrigued to learn more about the academic gaps students were experiencing and began crafting a version II of the survey that would provide more detailed answers. Given that informational needs ranked last, and that these needs were being met by existing UConn-specific apps, I decided to eliminate these questions in the next version of the survey. Focusing the questions on academic and social needs would help to hold respondents' attention since survey length and completion were a concern.

College App Usage Survey II - Results

The second survey went out the following month between 10/01/23 and 10/21/23 as a Google Form (See *College App Usage Survey II*, Appendix 4 and Appendix 5). With the assistance of many partners who helped distribute it, the survey was completed by 301 students.

Demographics

The second round of results had a more balanced male (49%) to female (46%) ratio. Given the quantity of respondents, minority populations were more represented in race and gender categories. The sample also represented other diverse populations, such as "first generation college student" (17%), "student with a disability" (8%), transfer students (10%), and international students (5%). (See Appendix 4.)

Among the undergraduate classes, the sample skewed younger: freshman class (42%). I saw this as a positive, since it would be the incoming population of students that would have more pronounced needs given their transition to college and the most to benefit from the results of this project.

Academic Needs – Survey Version II

In the second version of the survey, academic needs were divided into two separate questions: current needs (Question #5) and future needs (Question #6).

Current Academic Needs

Regarding *current* academic needs, respondents were asked to rank three needs. They identified “finding students in the same course for group chats or study partners” (164) as their most important need. This was followed by “finding students in my major/ minor for comradery” (109), while finding a tutor ranked last (27).

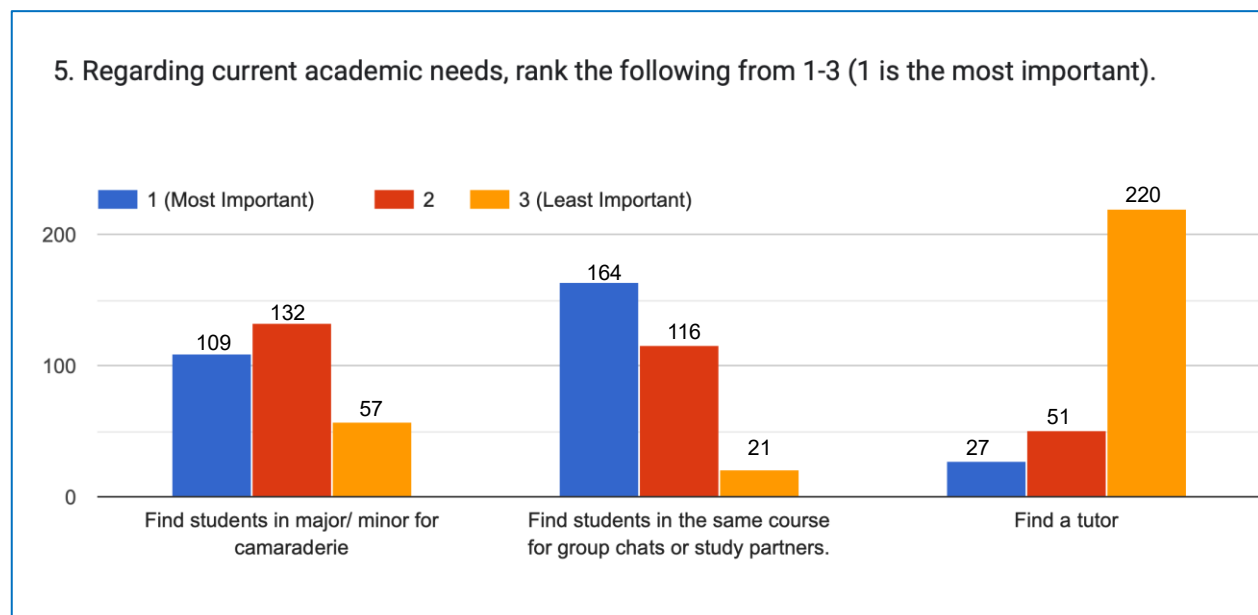


Figure 4.8: Survey II (Question #5) Rank current academic needs

Future Academic Needs

Respondents had five different choices to rank for their *future* academic needs.

When combining students' number 1 and 2 rankings, students' needs were as follows:

1. Find students in a specific major/ minor for guidance. (175)
2. Connect with students who had an internship in a specific field. (160)
3. Receive student opinions about a course, professor, workload, etc. (159)
4. Connect with students who have done research in a specific field. (83)
5. Connect with study abroad (16)

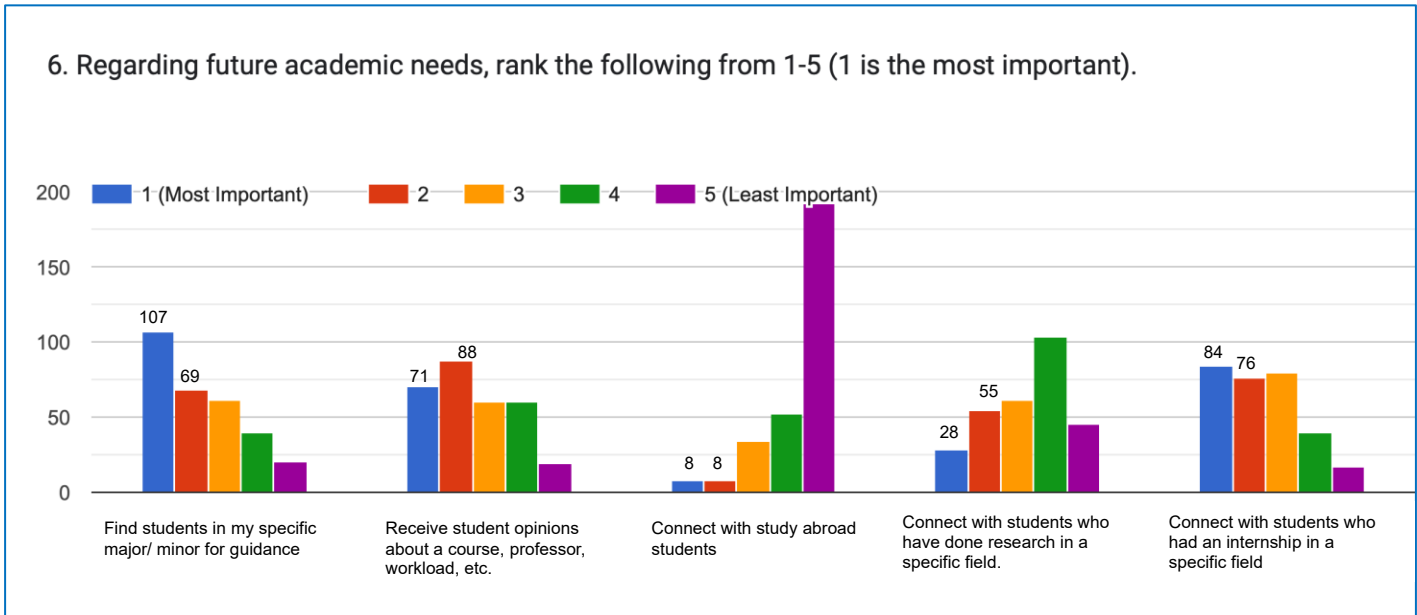


Figure 4.9: Survey II (Question #6) Rank future academic needs

This indicates that students are highly interested in establishing near-peer relationships to receive guidance within their chosen field of study. Separating Question #5 from Survey I into three distinct needs, revealed that student interest in internships exceeded that of research and study abroad opportunities.

Other Academic Needs

In order to allow students to voice any other needs not included in the survey, they were asked the following open-ended question:

7. Are there any other academic needs that you would like the app to address?

About half of the students responded (152). Verbatims can be found in Appendix 5. Response are categorized as follows:

- Advising (9)
- Study groups (8)
- Study materials (8)
- Internships/ jobs/ career (8)
- Mentoring (6)
- Meet students in major/ school / country (5)
- Professor support (4)
- Time management support (4)
- Disability/ mental health related (4)
- Tutoring (2)
- Grades (2)
- Misc. (9)
- No (20)

Apps Used to Meet Academic Needs

Students were asked which apps they used to meet their academic needs and once again, *Rate My Professor* was by far the top app (178). It was followed distantly by *Snapchat* (34) and *Reddit* (30).

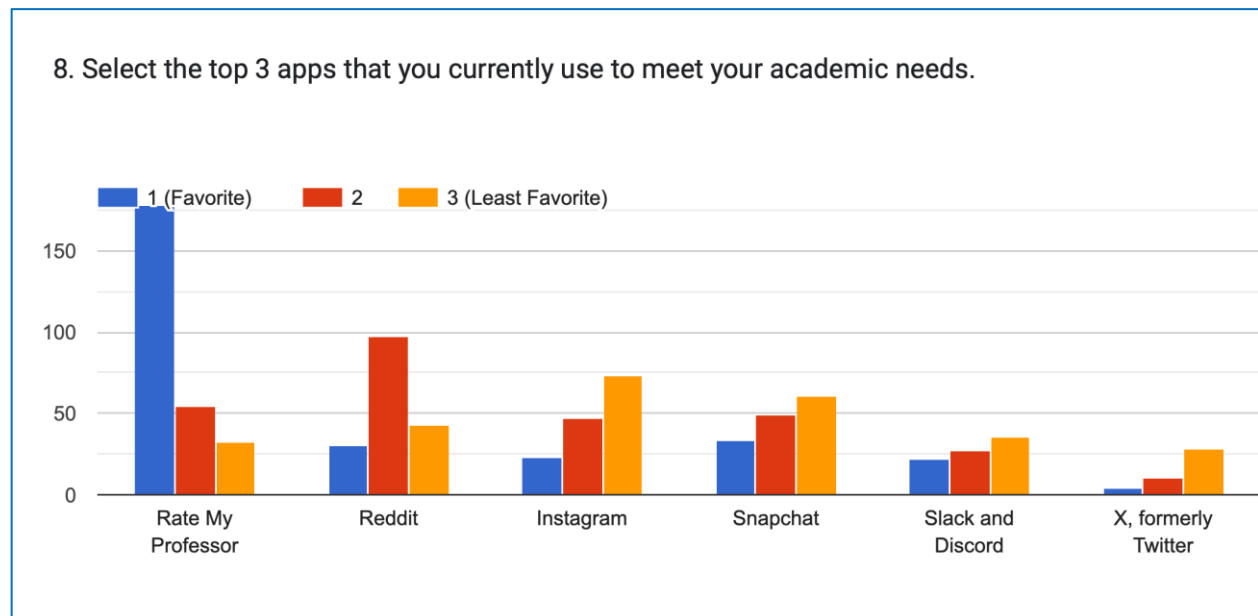


Figure 4.11: Survey II (Question #8) Apps used to meet academic needs

When students were asked how satisfied they were with their top app, 173 gave their app a 1 to 2 satisfaction level, indicating that the majority felt very satisfied (Question #9).

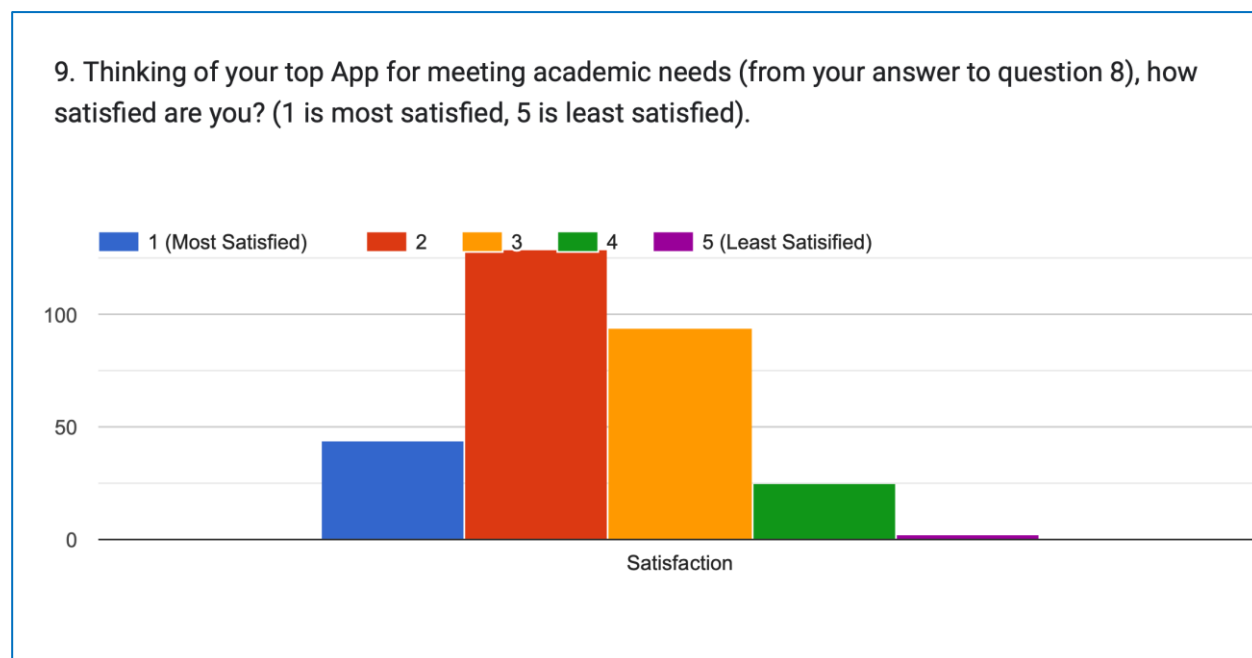


Figure 4.10: Survey II (Question #9) Satisfaction with apps for academic needs

When probed in Question #10, as to why they were *not* completely satisfied students expressed more dissatisfaction. Question #10 allowed them to check all that applied and write about other dissatisfactions.

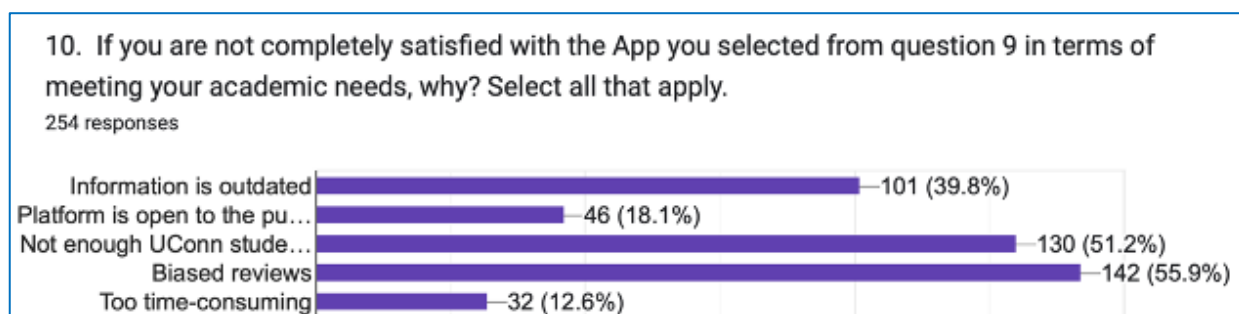


Figure 4.12: Survey II (Question #9) Satisfaction with apps for academic needs

56% of students felt that the reviews were biased, 52% felt that there were not enough UConn students on the platform, 40% felt the information was outdated, and 18% did not like that it was open to the public.

Thirty students filled in the open-ended field. These write-in responses fell into the following categories with some notable verbatims provided:

- **Rate My Professor comments** (13)
 - “For *Rate my Professor*, it’s hard to tell if the Professor is actually bad or if the student is just not good.”
 - “Some professors have no reviews or its for only certain classes they have.”
 - “Conflicting information on some professors.”
 - “Sometimes there is not enough participation on the site so the information can be inaccurate or outdated.”
 - “Making a review takes some time.”
- **Slack comments** (2)
- **Instagram comments** (1)
- **Group Chats** (2)
 - “You have to add all the kids in your class.”
- **Miscellaneous** (11)

Social Needs – Survey Version II

Students were asked how they would describe themselves socially. 58% of students wanted to expand their social circle, while 40% were satisfied with their circle. Only 2% expressed feeling overcommitted. Question #11 also gave the option to write in.

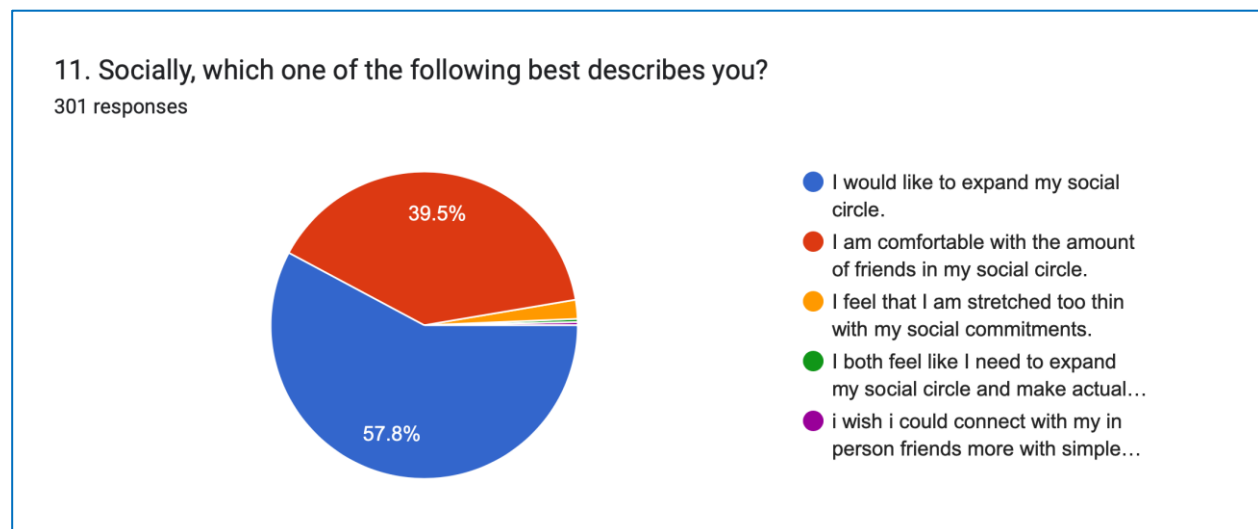


Figure 4.13: Survey II (Question #11) Provide social description

Students were asked to rank their social needs among five choices. Based upon the aggregation of their top two choices, social needs were ranked as follows:

1. Meet and find friends (256)
2. Make connections in a club or athletic team (134)
3. Connect with students living near me (133)
4. Find roommates (37)
5. Make connections in a Fraternity/ Sorority (31)

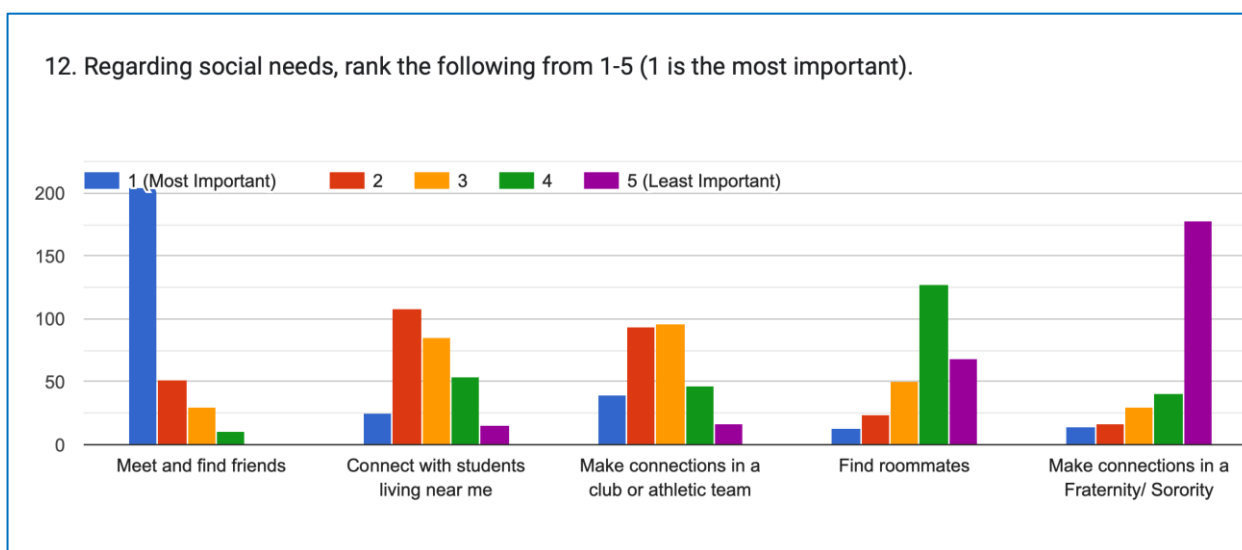


Figure 4.14: Survey II (Question #12) Rank social needs

85% of respondents ranked “Meet and find friends” in the top two, indicating a very high need. This was followed equally and more distantly by “Make connections in a club” (44%) and “Connect with students living near me” (44%).

Students were also given the opportunity to write in any other social needs not including dating, they would like an app to address in Question #13.

136 students wrote responses that fell into the following categories (See Appendix 4 for specific verbatims).

- Meeting friends (14)
- Information about social events (5)
- Professional support/ mental health / relationship support (5)
- Study groups/ study materials (5)
- Meet Students in major (3)
- Networking for opportunities for jobs, internships(3)

- Club information (3)
- Dating (2)
- Special interests (4)
- Miscellaneous (3)
- No (23)

When students were asked to select their top 3 apps for meeting social needs, they strongly preferred *Instagram* (n=152) and *Snapchat* (110).

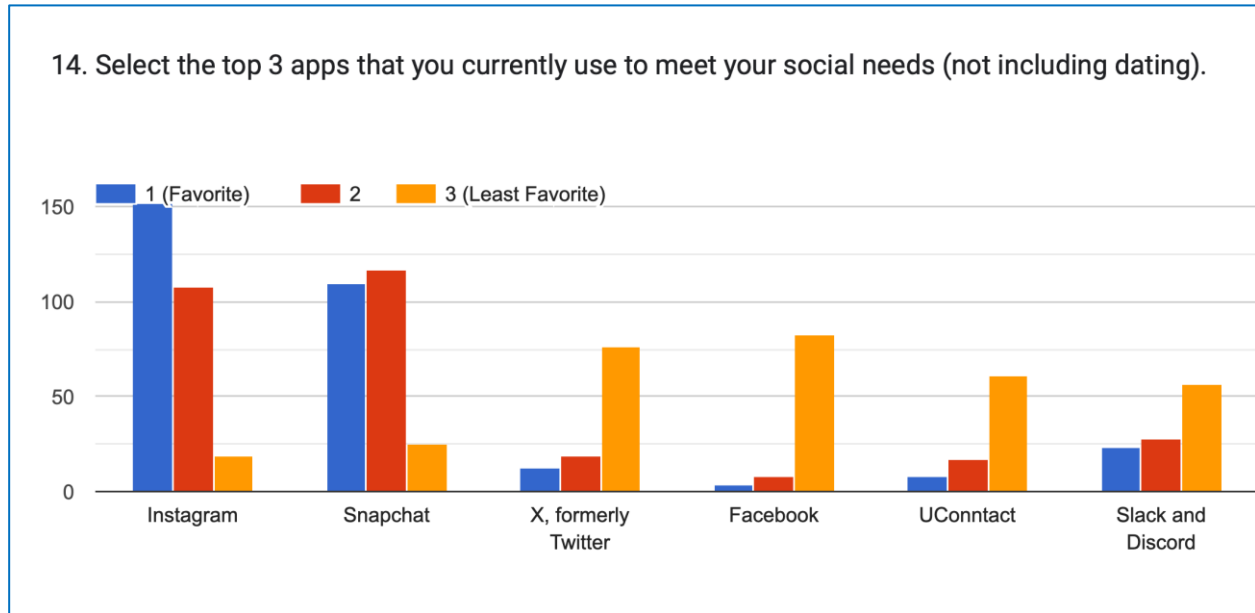


Figure 4.15: Survey II (Question #14) Apps used to meet social needs

Students provided high satisfaction scores of 1 and 2 (173) regarding their top app.

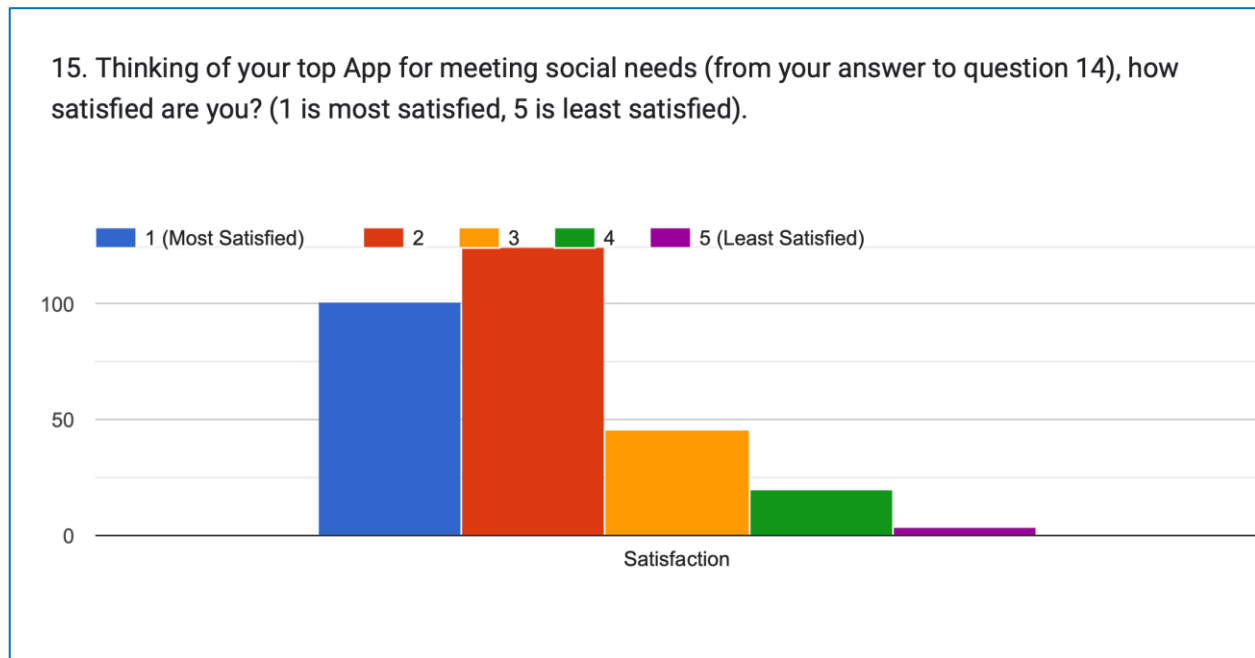


Figure 4.16: Survey II (Question #15) Satisfaction with apps used to meet social needs

When probed for their primary dissatisfaction with their top app, respondents stated it was “Hard to get to know people” (67%). The next highest dissatisfactions were “Platform is too public” (22%) and it is “Too time-consuming” (22%) indicating that even though students enjoy using social media apps like *Instagram* and *Snapchat*, these apps do not accomplish the goal of meeting and finding friends on campus adequately or efficiently, however, they meet some social needs.

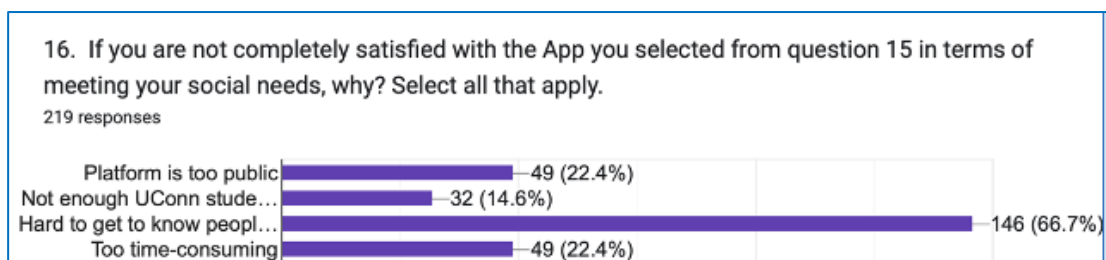


Figure 4.17: Survey II (Question #16) Dissatisfaction with apps used to meet social needs

Respondents were also permitted to write in their dissatisfaction with their top app. Twenty responses were received which fall into the following categories, with some notable verbatims:

- Do not like/use social media (5)
 - “I prefer to get to know people in person rather than virtually.”

- Do not like people's behavior on Social Media (4)
 - "Often times people do not respond to their posts for any information on meetups, events, or dates."
- Use different Apps (2)
- Various drawbacks trying to make connections with people (9)
 - "Instagram doesn't tell you how far people are from you."

Once students had completed Questions #5 through #16 regarding their academic and social needs and app usage, they were asked to rank those needs. When given a choice between an App that would address their social or academic needs on campus, two-thirds of students indicated wanting an academic App.

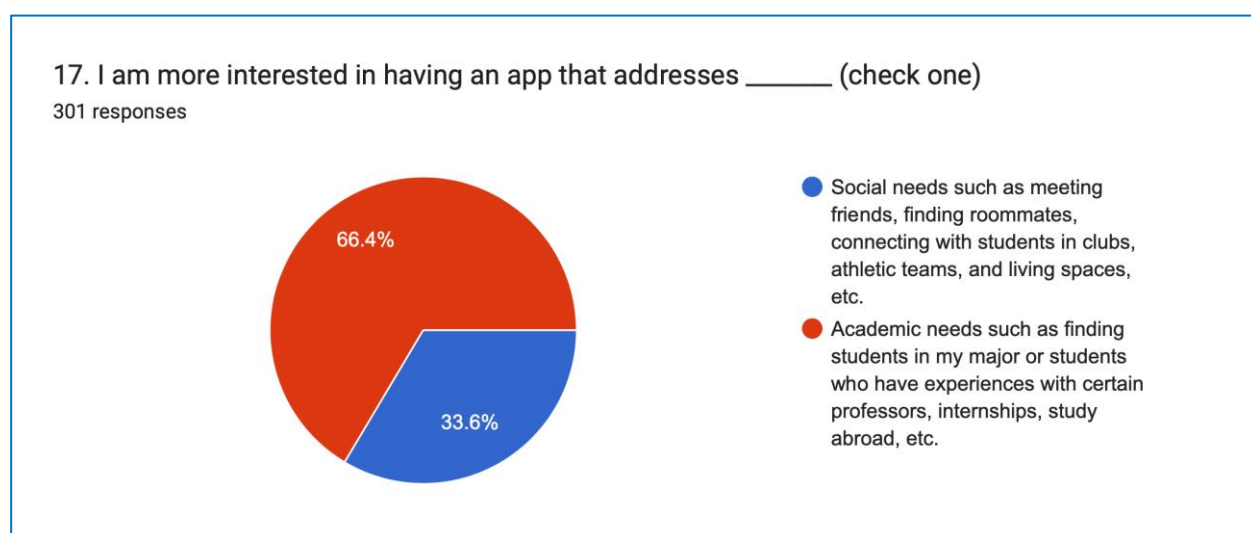


Figure 4.18: Survey II (Question #17) Indicate preference for a social v. academic app

Summary of Findings and Analysis – Survey Version II

The results of the second version of the survey indicate that students were willing to acknowledge their social gaps. Most students want to expand their social circle (66%) and state their top social need is to meet and find friends (85%). They primarily use apps such as *Instagram* and *SnapChat* to meet their social needs, yet they are realistic about their limitations stating that it is "hard to get to know people" on them. On a college campus, these apps are inefficient at connecting to clubs/ club sports, connecting students to those living near them, or finding roommates.

While students are keenly aware of their social needs, they rank their academic needs much higher. Two-thirds or 66% of students wanted an app to address their academic needs. When asked about current academic needs, students want to be able to create group chats and find study partners easily. At present the only way to create group

chats in a class is by asking every interested student for their phone number and entering them into apps like *Discord* or *Slack*. It is impractical to create group chats in large lecture courses and impossible in asynchronous courses. Students also indicated they want to find peers that are in their major for comradery. In some majors with smaller classes, students are able to meet, yet this might only happen during junior or senior year in advanced courses. Freshmen and sophomores have a much harder time meeting students in their declared majors, especially since many students fulfill core requirements in their first two years. These core/ content area classes are among the largest in the university, often between 100-200 students.

Regarding their future academic needs, students are looking to make connections to peers in their major for guidance, and insight into professors, courses, and internships. Lower-classmen have much to gain from connecting to near-peers in their majors who are a few steps ahead on a similar academic track. Lowerclassmen may inquire about course sequencing, as their time with academic advisors is typically limited to 30 minutes per semester. Upperclassmen may serve as informal advisors to students newly entering a field of study. The only app meeting academic needs, *Rate My Professor*, has substantial drawbacks such as, students feeling reviews are biased, outdated, insufficient in number and not private.

In the current climate of easy access to reviews for all kinds of products and services, students keenly feel that they lack adequate information about courses and professors to make well-informed decisions. An app that could correct the drawbacks of *Rate My Professor*, by having more students on the platform, more timely and private reviews would greatly benefit students in their decision-making. While *Rate My Professor* attempts to answer questions about professors and courses, it is not designed to meet students' academic needs of finding other students within their major for comradery and guidance or to learn about opportunities. Given that students identified their academic needs as more important than social needs and that there is a vacuum of apps operating in this space, I decided to design an app that would address these academic needs.

Section 5: Designing to Address Needs and Dissatisfactions

As a result of students' strong desire to have an app that addressed their academic needs, the focus of my project took a dramatic turn. Rather than focusing on ways to build community based on social interests, I realized that students wanted to focus on academic interests. I decided to design an app that would be a closed community since it would uniquely serve UConn. Students could log in by entering their college email. The closed community concept should attract participation because only genuine, authentic UConn students would be allowed into the app. Creating a community where conversations are private would help foster trust (Jaworski). When students made specific academic inquiries on apps, such as *Facebook*, *Instagram*, or *Reddit*, they received few responses. The idea of a secure, gated community was appealing to me. It evoked exclusivity, commonality, and a sense of security. Hence, the name *Gated* was born from memories of historic campuses with physical brick and iron gates. Effective user experience design could create a virtual college-gated community. I landed on the following tagline to introduce the app.

GATED
Unlock your college experience

My app design would focus on introducing students to one another based on their areas of academic interest for comradery, assistance, guidance, and mentoring. There would be a secondary social component, but the heart of the app would be making academic and collegial connections. I began designing features from the ground up, checking off each need identified in the survey that could be addressed. The following wireframes, or sketches of “the skeletal outline of the layout” of the app, explain how I planned to address those needs through user experience design (Solomons et al., 137).

The wireframe shows a login screen layout. At the top is the text 'App Name'. Below it is a large, light-gray circle representing a profile picture placeholder. Underneath the circle are two text input fields: the first is labeled 'School Email' and the second is labeled 'Password'. At the bottom of the screen are two rounded rectangular buttons. The top button is labeled 'Login' and the bottom button is labeled 'Create Account'.

Figure 5.1: Login Screen

Addressing Current Academic Needs

#1 Need: Find students in the same course for group chats/ study partners

Enter your classes for this current semester. Each class rating earns you 3 "Course" searches. Entering 4 reviews or more unlocks unlimited searches for this semester. You can always rate courses later.

Spring ▼ 2023 ▼

Department ▼ Course # ▼ Instructor ▼

Rate

Department ▼ Course # ▼ Instructor ▼

Rate

Department ▼ Course # ▼ Instructor ▼

Rate

Department ▼ Course # ▼ Instructor ▼

Rate

Department ▼ Course # ▼ Instructor ▼

Rate

- +

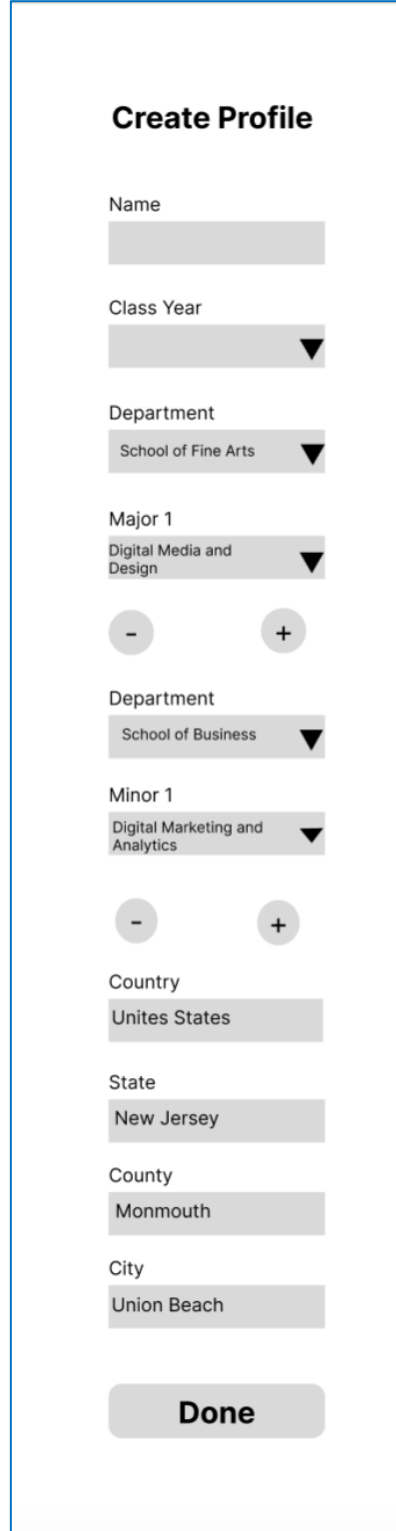
Done

According to Survey II from Section 4 of this thesis, students expressed that connecting to other students in their courses was their #1 need. To find fellow classmates, students would be asked to input their current courses in the [Enter Courses](#) screen of the app. This would allow them to find other students through the use of filters by course and by semester. After receiving search results, a student can create a group chat or contact an individual.

Figure 5.2: Enter courses screen

#2 Need: Find students in same major/ minor for comradery

In order for students to find peers in their major/ minor, users would be asked to input their major/ minor in their [Profile](#) during onboarding. By also providing their class year, students would be able to find others in their same class who have the same major/ minor through the use of filters in the [Search People](#) screen. Students can then choose to contact peers based on search results.



Create Profile

Name

Class Year

Department

Major 1

- +

Department

Minor 1

- +

Country

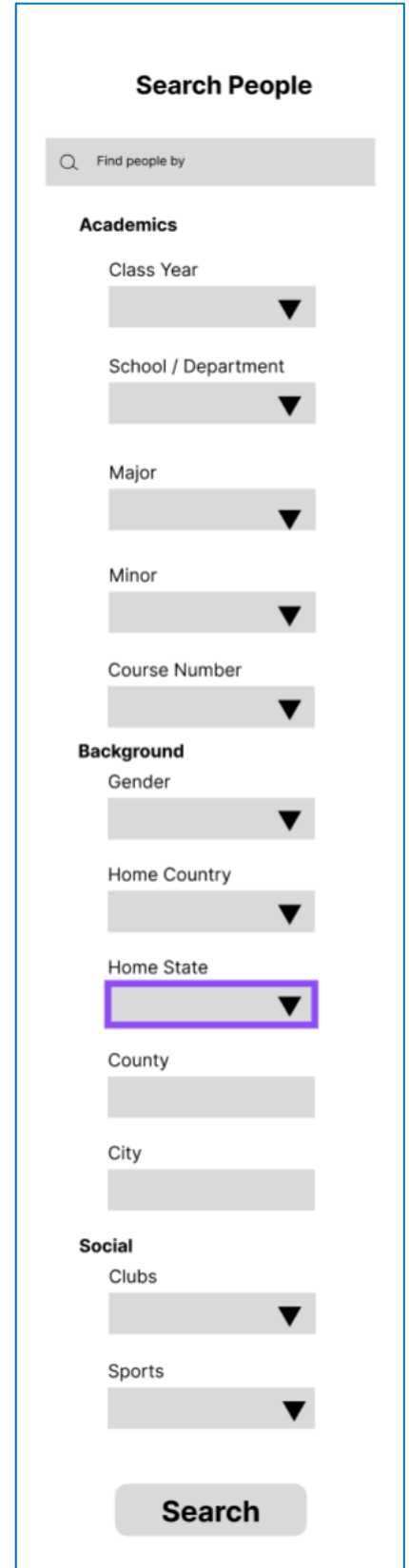
State

County

City

Done

Figure 5.3: Create Profile screen



Search People

Find people by

Academics

Class Year

School / Department

Major

Minor

Course Number

Background

Gender

Home Country

Home State

County

City

Social

Clubs

Sports

Search

Figure 5.4: Search People screen

#3 Need: Find a tutor

Although finding a tutor ranked the lowest among current academic needs, it could be fulfilled using search methods similar to those above. Since students were already asked to input their course and the year they took it during onboarding, a searcher could find other students who had already taken it.

I added a new *Recognition Wall* to help the searcher and reward engagement. This feature allows students to express their thanks when a fellow student helps them. By rewarding assistance, the helper student can build social capital on the platform. Social capital is, “the value derived from connections between people” (Mask). This way, the helper would display their expertise and attract connections. A searcher looking for a tutor could ascertain a near-peer’s willingness to assist by looking at statements from others on that student’s *Recognition Wall*. Whenever students receive a post of thanks on their *Recognition Wall*, they can accept it and allow it to be public or remove it. In this way, students manage their reputation by only allowing accepted posts to be visible on their *Recognition Walls*.

Figure 5.5: Recognition Wall input screen

Addressing Future Academic Needs

#1 Need: Find students in same major/ minor for guidance

Students expressed a strong desire to connect with peers who were a few steps ahead in their area of study in order to ask for guidance. On the [Search People](#) screen, students can search by major/ minor filters and enter a class year that is higher than theirs. After receiving results, students can gain further information about potential mentors by reading comments left by others on that student's [Recognition Wall](#) to learn more about their expertise and willingness to assist. The seeker can then private message the upperclassman student to make contact.

#2 Need: Connect with students who had an internship in a specific field

Even though connecting with students for internship information received a high rating, it was outside the scope of my project. *HuskyLink* already had launched a robust offering for finding internships.

#4 Need: Connect with students who have done research in a specific field

This feature could not be built within the scope of this project.

#5 Need: Connect with study-abroad students

Students are able to find peers who have attended study-abroad programs in the past or who are currently enrolled by entering study abroad course numbers into the [Search People](#) screen.

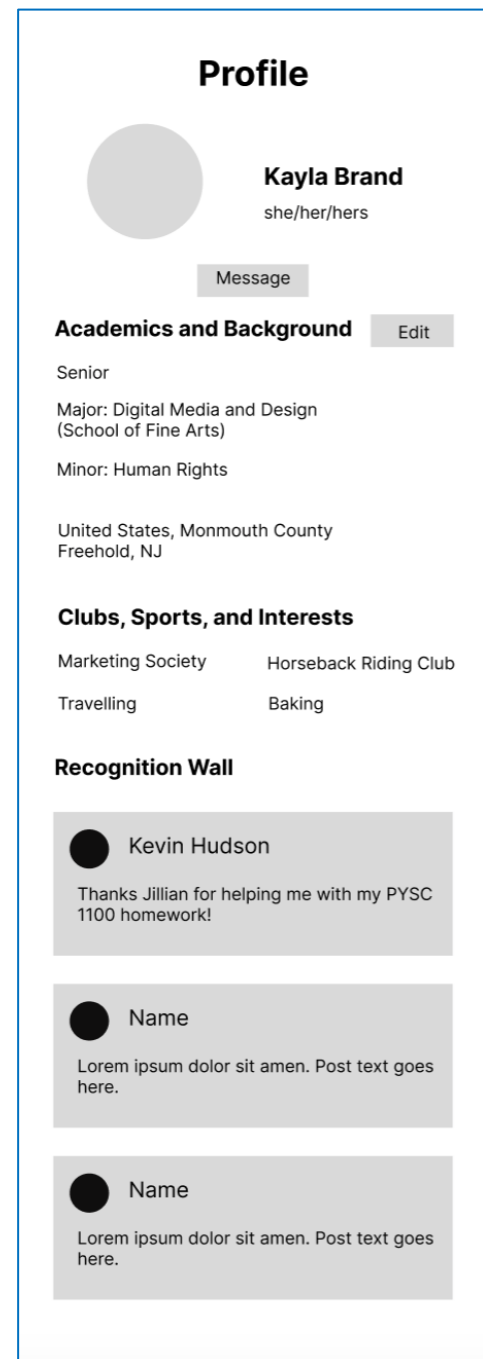


Figure 5.6: Profile screen

#3 Need: Receive student opinions about a course, professor, workload, etc.

From the survey, I knew that students were finding information about courses and professors mostly on *Rate My Professor* (233 students/ combining their 1 and 2 rankings) and *Reddit* (127 students). I also learned about their primary dissatisfactions with these apps and tried to address them in my design.

#1 Dissatisfaction: Biased Reviews 56%

Students expressed that they could not trust the reviews on *Rate My Professor* because the same professor could receive glowing remarks from one reviewer while scolding comments from another. One respondent wrote, "...it's hard to tell if the professor is actually bad or if the student is just not good." This severe flaw made the information on *Rate My Professor* not credible. To mitigate this issue, more reviews should be written about any given professor or course. A more significant number of reviews would cancel out the extremes. In addition, adding an upvoting feature would allow helpful reviews to be more visible and encourage reviewers to behave professionally since people generally feel rewarded by having their comments upvoted (The Psychology of Being Liked).

On *Rate My Professor*, there was no incentive system to write a review. Writing reviews can be time-consuming, creating a situation where only a highly motivated student would write a review, resulting in fewer reviews. These more motivated students will likely be on the extremes: students who loved or hated the instructor. I tried to obtain UConn's Student Evaluation of Teaching (SET) data for more professor reviews to use in *Gated*. UConn professors highly encourage all students to fill out an end-of-semester survey. Some professors incentivize students with extra points on an assignment or exam. This generates many reviews where outliers can be outweighed by the majority. This data is collected by UConn's Center for Excellence in Teaching and Learning (CETL) and is currently shared only with instructors and department heads. The SET data is comprehensive, as its purpose is to help instructors improve their teaching. A small subset of questions would be helpful to students, so only a small portion of the data would be used in my app design. If obtained, I could preload the answers to a few questions into *Gated*. If students knew they had access to the aggregated SET data, they would be even more motivated to complete the end-of-semester surveys. The end result would be more accurate data for both instructors and useful unbiased information students could use to inform their course selections. Unfortunately, after several attempts, I did not obtain the SET data even as a small sample. Since this information was so critical to my app design, I decided to build a rating feature so students could input their opinions about professors and courses directly into the app.

Dissatisfaction #2: Not Enough UConn Students (142)

Dissatisfaction #4: The Platform is open to the Public (46)

The next significant dissatisfaction on the survey was the lack of UConn students participating on the platform (*Rate My Professor* or *Reddit*). The closed community model should encourage more student participation, but students need more incentives to rate their courses. I chose to create another “gate.” Students would be asked to rate a certain number of courses to receive access to other students’ reviews. Once they input their data, the gate would unlock for one semester.

Dissatisfaction #3: Information is Outdated (101)

If *Gated* was launched, all student information would initially be up-to-date. To keep information current, filters could be added. Students would be able to search reviews by year and semester. Another way to keep the rating information up-to-date was to implement the gates every semester. Students would not gain access to other student’s reviews, until they input their reviews. I chose not to incorporate the details of this design at this time, as it was not immediately relevant. This concept would also need to be user tested to fully understand how students would respond to acquiring information and then experiencing the restrictions of the gating system.

Dissatisfaction #5: Too time consuming (32)

It was surprising to learn that only a low number of students found using *Rate My Professor* or *Reddit* time-consuming. Nevertheless, time consideration is always a concern as this can be a hurdle for anyone using an app that requires a lot of inputting. To make things easier for the user, drop down menus for the course catalog and professors’ names were preloaded into *Gated*. Students will be asked to input less information than is requested on the SET survey and about the same as *Rate My Professor*. Students do not necessarily have to rate all of their courses at the same time. If they want to, students can rate one course during onboarding and then the others on the *My Courses* screen at a later time. Students will feel incentivized to complete their ratings as they need access to more search results.

Designing the *Rate a Course* Screen

To design the screens to rate professors and courses, I drew inspiration from the following websites:

- UConn’s SET end-of-year survey (“UConn Student Evaluation of Teaching...”)
- *Rate My Professor* (<https://www.ratemyprofessors.com>)
- Harvard’s Q report (“View Q and Interpret Results”)
- Georgia Tech’s OMS Reviews (“OMS Reviews”)

I chose the Harvard Q report because the rating system had longevity as well as simplicity. The Georgia Tech report focused on computer science classes and had interactive components. These reports are only provided to students attending these colleges, but I gained limited access to them through school alumni. There were

commonalities to all these rating systems, and some questions were better phrased or visually depicted than others. I built upon the best ideas to create the *Gated* rating feature. The final rating questionnaire contained nine questions with one write-in area for comments and the option to upload a course syllabus.

Course Review Questions

All answers will be anonymous.

Course Evaluation

1. Please rate the difficulty level of the course?

☐ (1) Very Easy

☐ (2) Easy

☐ (3) Average

☐ (4) Difficult

☐ (5) Very Difficult

2. On average how many hours a week did you spend outside of class preparing for this course?

☐ 0

☐ 1-3

☐ 4-6

☐ 7-9

☐ 10-14

☐ 15+

3. What is your overall rating of the course?

☐ (1) Poor

☐ (2) Fair

☐ (3) Good

☐ (4) Very Good

☐ (5) Excellent

4. How strongly would you recommend this course to your peers?

☐ (1) Not Recommend

☐ (2) Not Likely to Recommend

☐ (3) Recommend with Concerns

☐ (4) Likely to Recommend

☐ (5) Highly Recommend

Figure 5.7: Course Evaluation screen

Instructor Evaluation

Please state whether you agree or disagree with the following statements.

5. Instructor gave effective whole class instruction/ lectures.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

6. Instructor gave clear assignments.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

7. Instructor graded work in reasonable amount of time.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

8. Instructor or TA was available outside of class hours.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

9. Rate your Instructor overall.

☐ (1) Poor

☐ (2) Fair

☐ (3) Good

☐ (4) Very Good

☐ (5) Excellent

Figure 5.8: Instructor Evaluation screen

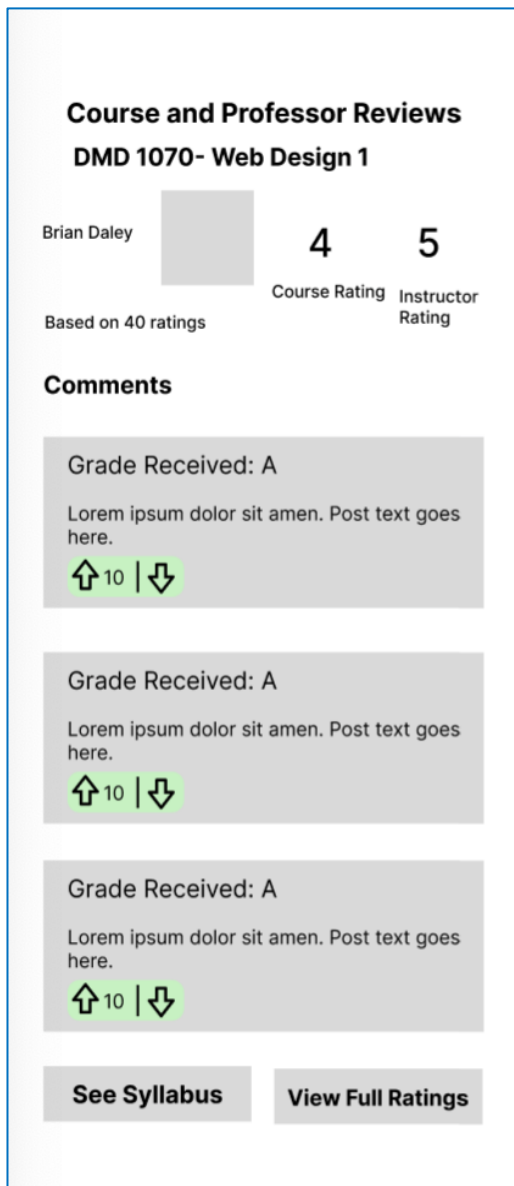
Comments

What would you like students considering taking this course to know? Your comments will be anonymous.

What grade did you receive in the course?

Upload syllabus here (Optional)

Figure 5.9: Instructor Evaluation screen continued



Since many students will begin their search process for the upcoming semester several months before to the actual start of the semester, and researching courses may take several weeks, I added a feature to keep future courses in a cart or holding area. This feature is called *Future Courses*. As students narrow down their search, they can add or drop these courses to create their final list (see Figure 7.22).

Figure 5.10: Course and Professor Reviews Evaluation results screen

Addressing Social Needs

Even though students stated that their academic needs ranked much higher than their social needs, *Gated* is able to address some limited social needs.

#1 Need: Meet and find friends (256)

Students will create *Profiles* during the onboarding process. The more information they input, the more ways they have of connecting to other students who are searching on that filter criteria. Information on the *Profile* pages will be public within the *Gated* community. In addition to academic profile questions, students can add information about their gender, race, and hometown. (See Figure 5.3)

#2 Need: Make connections in a club or athletic team (134)

#5 Need: Make connections in a Fraternity/ Sorority (31)

UConn has about 723 clubs, 58 sports (38 club and 22 D1 sports), and 44 fraternities/ sororities. Students looking to meet other members of clubs, teams, and fraternity/ sorority members can enter this information on the *Search People* screen. Students can select from a preloaded drop-down menu for ease of use. From the results page, students can browse other student profiles, and create a group chat, or private message other students.

#3 Need: Make connections with students living near me (133)

#4 Need: Find roommates (37)

Given that UConn has such a large campus, it is no wonder that students wanted help meeting others who live near them. A preloaded residence/ dorm drop-down menu will help students find each other based on location (see Figure 7.12). This might also be helpful when students are making decisions about where to live and would like to make contact with others in a specific residence.

Profile

 **Jillian Milton**
she/her/hers

[Edit](#)

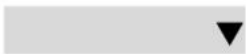
Senior

Major: Digital Media and Design
(School of Fine Arts)

Minor: Digital Marketing and Analytics
(School of Business)

United States, Monmouth County
Union Beach, NJ

Clubs, Sports, and Interests [Edit](#)

Clubs

- +

Sports

- +

Interests

- +

[Done](#)

Figure 5.11: Instructor Evaluation screen

Also, it may not be easy to meet students that are in a separate wing or building of a large residence. With *Gated*, anyone already living in a specific residence will be able to find others who live there by searching on the residence filter.

Home Screen

To house the main features of the app, the home screen will have [Search People](#) and [Search Courses](#) buttons to initiate the primary actions. There will be a button for the student to see their courses, [My Courses](#), which will also take them to their [Future Courses](#) if they are working on the next semester. The home screen also has the most current chat notifications that will appear as a feed. Lastly, the [Recognition Wall](#) will also appear here as a feed and remind students of their positive contributions to their community, and to incentivize them to keep engaging with others.

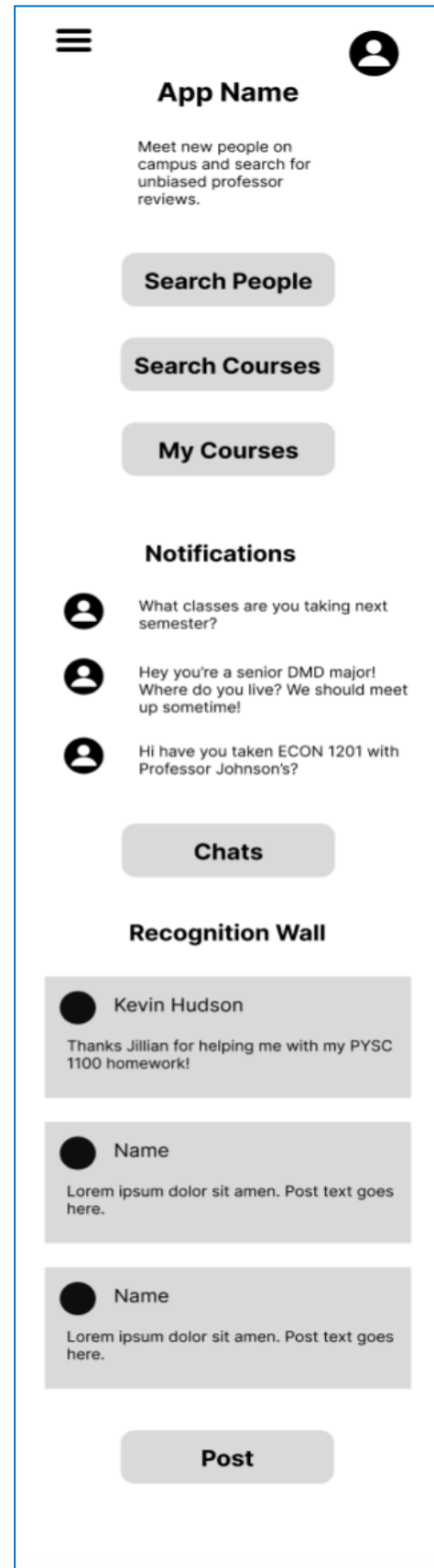


Figure 5.12: Home screen

User Personas

To demonstrate how students might interact with *Gated*, I created fictional user personas who would approach the app with various intentions.

Academic Needs

Below are examples of how user personas can satisfy their academic inquiries with *Gated*.



Time's Up Tina: Changing majors

Tina just finished her freshman year and has been thinking about changing majors. She is not alone, about 75% of students change their major at least once during their college career (Sun). Time is running out, and Tina needs to settle on a major by the end of her sophomore year. She met with her Computer Science and Engineering (CSE) advisor, but the advisor did not know much about the new major she is considering, Analytics and Information Management (AIM), as it is outside the department. Tina is worried that changing majors will lead to the financial burden of another semester. Can she get credit for some courses she thinks may overlap?

Action on Gated:

Tina can go to [Search Courses](#) in the Analytics and Information Management major and download syllabi for courses she believes are similar to those she has already taken. Tina goes to [Search People](#) and finds students who have taken those courses and are in the AIM major. Tina contacts those students to gather information about petitioning for course credit.



Group Chat Charlie: Academic group support and tutoring

Charlie is a sophomore business major and is taking Accounting this semester. He is finding it difficult. Charlie wants to create a study group to keep himself on track. He would also like to line up a tutor before the midterm.

Action on Gated

Charlie goes to the [Search People](#) screen and selects "ACCT 2001," Principles of Financial Accounting, under the course number drop-down menu for this semester. Based on the results page, he can create a group chat to inquire if anyone is interested in forming a study group. To find a tutor, Charlie will do a similar process except he will search for people who took ACCT 2001 during a previous semester to find someone who has already taken the course. He can then create a

chat to ask if anyone is interested in offering tutoring services for this class.



Grad School Gary: Strategy for Grad School

As a junior, Gary is focused and committed to his plan to get into medical school. Gary needs to meet rigorous pre-med requirements and maintain a high GPA. He is keen to learn about optimal course sequencing, professors' teaching styles, and how to balance his heavy workload.

Action on Gated:

Gary opens the [Search Courses](#) screen and selects "CHEM 2443" to see the difference in ratings between two chemistry professors. Based on the comments, he decides one professor has a teaching style that is a fit for him. Gary will also go to the [Search People](#) screen and enter "Seniors" and "Biology" majors. He contacts a few upperclassmen via the chat to get answers about his course sequencing strategy.



Passionate Paula: Adding an Unrelated Minor

Paula is a sophomore psychology major with a passion for music. She wants to add music as a minor or even as a double major. Can she incorporate her passion for music while not hurting her chances of getting into a master's program?

Action on Gated

Paula goes to the [Search People](#) screen to find juniors and seniors who minor in music. She plans to contact them to ask how they balance their course work before making a decision.

Social Needs

Students can also use *Gated* to make connections on some social parameters. Here are examples of how students can use *Gated* to connect socially.



Lacrosse Larissa: Joining a club

Larissa is interested in playing club lacrosse. She would like to meet others in the club to learn more about the commitment and see if this athletic team is the right fit for her.

Action on Gated

Larissa will go to [Search People](#) and select “lacrosse” within the [Clubs](#) dropdown menu. The results page will generate women’s lacrosse players whom she can contact.

**International Lin: Finding people from home**

Lin is an international student from China who has never lived in the United States. He wondered if there were any other students who were at UConn from his home country.

Action on Gated

Lin will go to the [Search People](#) screen and under [Home Country](#), select “China” from the drop-down. Lin is happy to learn that there is a community of students attending UConn from China. According to the UConn population data, the most common country international students come from is China (“Fact Sheet 2023”). He reaches out to them for comradery and support.

**Roommate Tate: Finding roommates**

Tate and his roommate are in a quad. Two of their roommates are going abroad next year, but they want to keep their suite. They want to meet two other students who would like to share the suite.

Action on Gated

Tate can go to the [UConn Dorm](#) dropdown menu and select his dorm. He can create a group chat within his residence hall to let others know that he and his roommate are looking for two others for next semester.

**Home-bound Hailey: Finding a ride home**

Hailey lives in New Jersey, which is driving distance to UConn. She is looking for a ride home for spring break.

Action on Gated

Hailey will go to [Search People](#) and select “New Jersey” from the [State](#) drop-down menu. She will be able to see a results page with students who live in her state. She can even narrow the search down to her [County](#), “Bergen.” She decides to contact a handful of students who live near her to find a ride home.

In many ways the design process for *Gated* began before designing the primary research surveys. I aimed only to ask survey questions that would provide responses that would be actionable and solvable with user experience design. I did not think the survey would lead me to designing an academic app. Through creating user personas, I understood why my classmates wanted an app to help them with their academic needs. According to the survey results, students perceive a lack of information regarding academic decisions such as advising and course descriptions. Students frequently find themselves at crossroads and under time constraints to make those decisions with little information. They are surrounded by a wealth of resources in the lived experience of their classmates, yet they cannot easily access those students' expertise. I drew from my experiences as a student and those of my peers to empathize with students' day-to-day decisions that students face. I related to the user personas and asked myself, "What information would I need to make this decision?" These information pathways would eventually become features. The wireframing process was the most time-intensive and complex part of this project, as much thought needed to be put into the information architecture, or "the way data and content are organized... to support usability" (Solomons et al., 137). *Gated's* design addresses the academic gaps students identified in the survey and even goes beyond those needs to fulfill some social needs. The next step in the design process would be to bring the wireframes to life by working on the final design and prototype.

Section 6: Creative Choices

The concept of a gated college community inspired me. I had seen historical campuses that used physical gates. A Pulitzer-prize-winning architecture critic, Blair Kamin taught a course at Harvard's School of Design about the college's gates. He then assembled the research into a book entitled *The Gates of Harvard Yard*. Mr. Kamin reflects on these gates:



"In the same way that a funnel channels the flow of water, gates funnel the flow of people, but they do so with great artistry, and that's how they enrich everyday human experience...One of my favorite gates is the Dexter Gate. Above the entrance is an inscription that's often quoted, "Enter to Grow in Wisdom." And that inscription summarizes the passage from ignorance to wisdom that a university education is supposed to be all about" (Glusac).

Figure 6.1: Harvard students wait by the gate to get into the quad during a lock-down ("Harvard Locks Down Quad during Protest")

The symbol of college gates conveys a rite of passage, maturation, and preparation for the outside world. Students are chosen to enter to focus on learning; they seclude from the outside world for a time. They learn from professors and from each other. As the Dexter Gate inscription states, students grow in wisdom in this unique community of scholars.

When students look for a college, many have a romanticized view of life on campus. They imagine green spaces and quiet nooks where they can discuss their intellectual pursuits with peers. Lecture halls where professors and mentors challenge their thinking. I wanted to juxtapose the idea of exclusivity and privacy with that of open spaces. The life inside the gates would be one of exploration, connection, and belonging. I settled on the logo below with the tagline, *Unlock your college experience*, to entice the user to enter.



Figure 6.2: Princeton's main gate opens to a lush green quad (Le Queinec)

Logo Selection

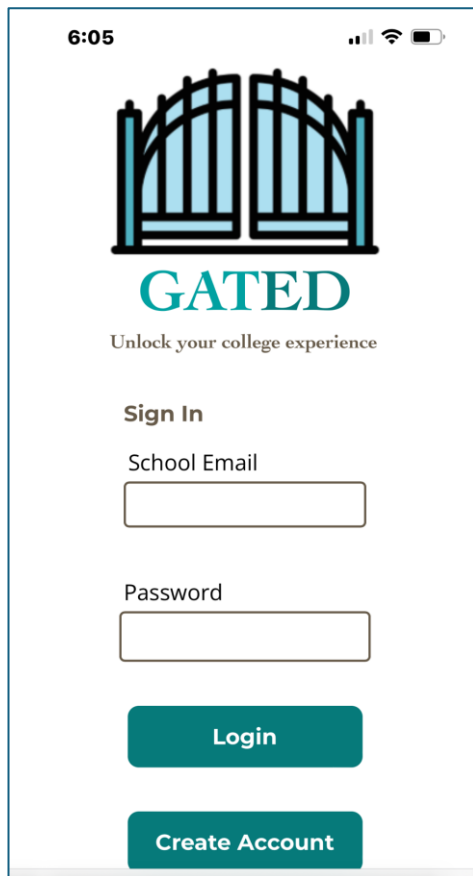


Figure 6.3: *Gated's* Sign-In screen, coded version (Ryabokon, "Sensor Gate Vector Icon Flat")

While searching for a logo, I looked for a modern and clean image of a gate to symbolize the online world, yet one that would harken to a historical era. I wanted a blend of the virtual world with the traditional because, at its core, obtaining a college education is the same as it has always been. We merely have different tools today to accomplish those educational goals.

The logo, *Gated*, is set in two tones that subtly emphasize the "ED" within the word to represent "education," signaling to the user that the app is academic. The logo font is Cochin, a traditional serif font that nods to the historical nature of education.

Color Palette



Figure 6.4: Blue ivy on a building (Roberto).

I chose greens and earth tones to symbolize the physical open spaces of a college campus. I initially began with a grass-green to pick up on the colors of the trees and lawns but later changed to a blue-green to pick up on the darker, cooler colors found in the blue ivy that grows on old college buildings. As I designed, I felt the higher contrast ratio of the blue-green increased legibility (“Success Criterion 1.4.6 Contrast”). Bronze-brown and ivory were selected to add neutral warmth and counterbalance the cool blue-greens.



Figure 6.5: UConn's Mirror Lake is a favorite student area to meet and relax (“Reflections on Mirror Lake”).



Figure 6.6: UConn's iconic great lawn is central to campus identity (Foran).

Natural open spaces inspired the final color palette, reminiscent of the spaces students traverse to get to their classes and where they stop to socialize and exchange ideas.

Typography

A common practice in User Experience Design is to choose two fonts, one for the header and one for the body text (Costello et al., 261). I chose Montserrat and Open Sans.

Montserrat

I wanted the headers and buttons of the app to be sans-serif. Montserrat is a sans serif font that is easy to read. The font needed to be modern, simple, and functional. I chose Montserrat, finding its wider type face to be highly legible. Since students have significant reading demands and high screen times in college, the font needed to be comfortable even when used in smaller point sizes to not add any eye strain. On the practical side, Montserrat is a web-friendly Google font.

Open Sans

I chose Open Sans because it is another sans-serif web-safe font that works on all browsers and devices. Open Sans has many different weights, such as regular, bold, and italics. The regular version was a suitable thickness for the main body of text— not too faint or bold. It is playful but modern at the same time. The wide spacing between the letters makes Open Sans easy on the eyes. Most sans serif fonts are also preferred for visual accessibility (V, Sofia, “Font Readability Research”)..

The typography and color palette are combined to form a style tile, as shown in Figure 6.7.

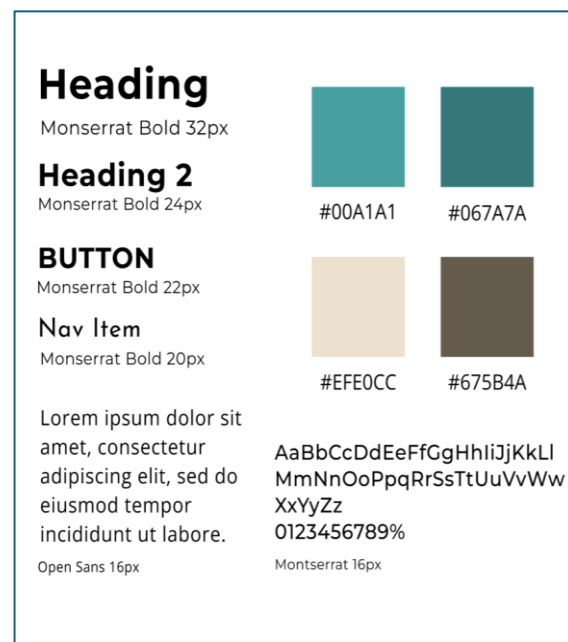


Figure 6.7: *Gated* style tile

In summary, I based my creative choices for *Gated* on the physical college campus experience. However, *Gated* aims to translate the physical interactions that may occur naturally or serendipitously among students into the virtual world, where they will occur deliberately and purposefully. The user experience gates will funnel persons to meet one another based on the areas of interest they select so that they can find one another.

Ann Marie Lipinski further writes of Harvard’s college gates as points of entry into a larger experience,

“...a gate is indeed a physical thing, but also an aspiration — of beginning, of belonging, of entry into something bigger than oneself (Harvard Gazette).

The college experience is broader and greater than pure intellectual knowledge. The full experience is about growing in wisdom with, and as a result of, your peer relationships. *Gated’s* focus on academic interactions between peers and how those peers share and help each other to enter the wider world sets it apart from other apps in the academic space.

Section 7: Final Designs and Prototyping

***Design is not just what it looks like and feels like.
Design is how it works.***

Steve Jobs (Costello et al., 167)

Utilizing Figma, a UX Design software, I created twenty-one screen designs for *Gated*. The Figma screens were then prototyped, which helped map out the flow of information and confirm that the design actually worked before proceeding to code. The final prototype connections are depicted by the arrows in Figure 7.1.

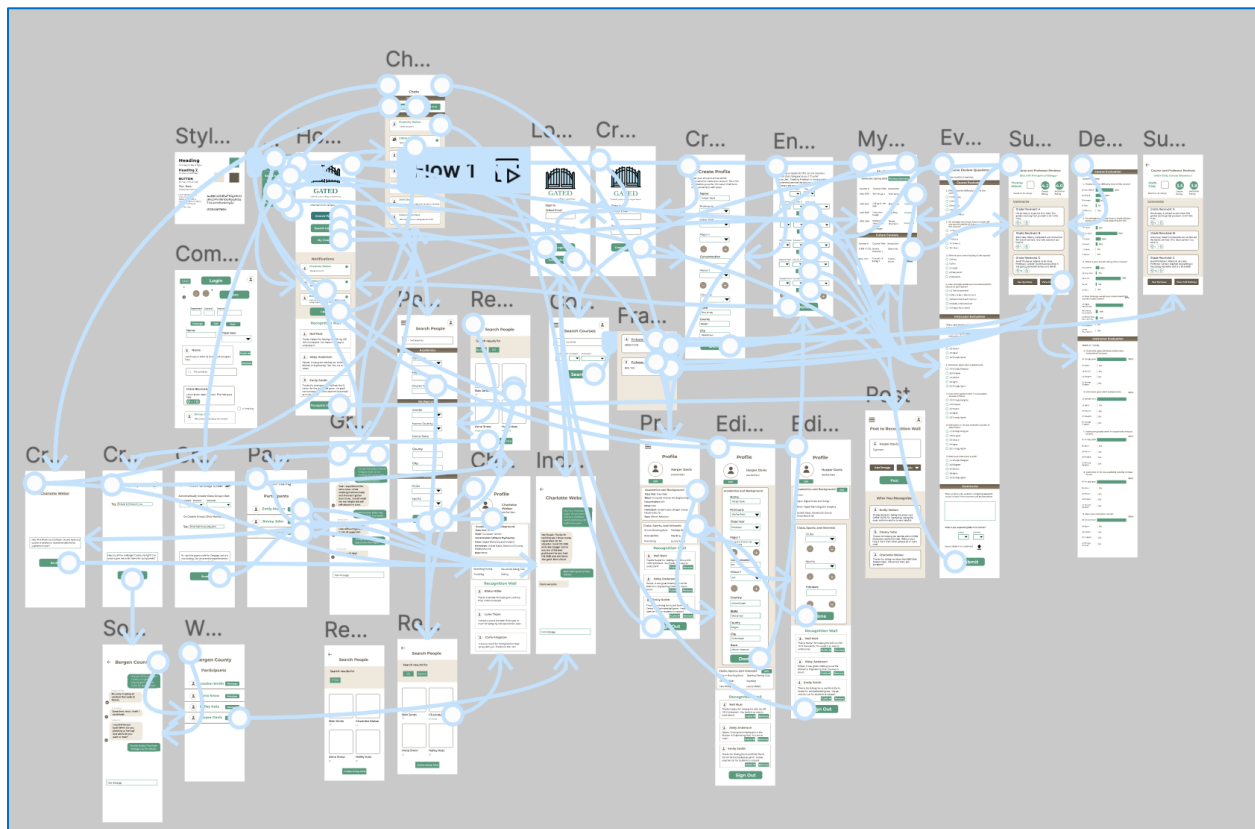


Figure 7.1: *Gated* Figma Prototype

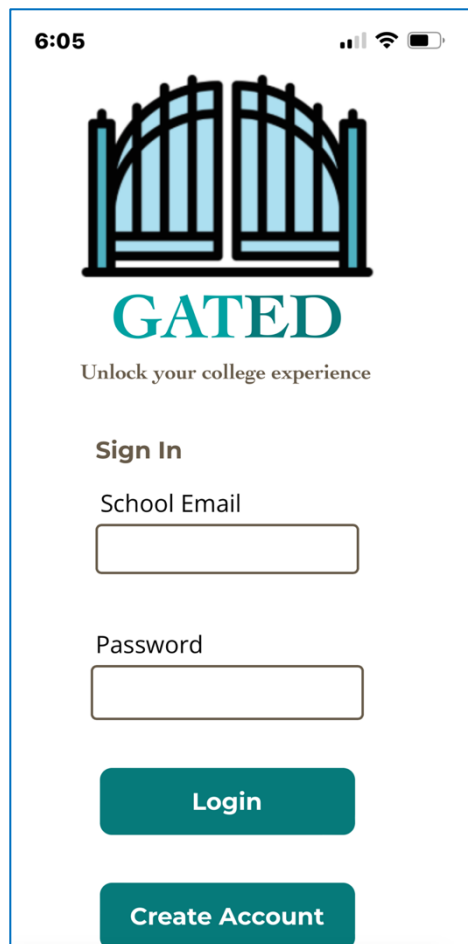
Given that these information pathways are complex, I will provide the main user information flow maps per feature. Each feature will have a table that lists all the screens contained therein. The final coded screens are shown, as they mirror the Figma designs.

Onboarding Screens

Table 7.1: Gated Onboarding Screens and Functions

#	Screen Name	Function
1	Log In	Only UConn emails allow the user to advance to the next screen to ensure a closed community experience
2	Create Account	Create account if none exists, requires password for privacy
3	Create Profile	Name, class year, major, hometown, etc.
4	Enter Courses	Current or past courses with option to rate now or later
5	Rate a Course	Nine multiple-choice questions with one open-ended comment section, grade received, option to upload syllabus
6	Profile Completed	Profile includes Academics and Background, Clubs, Sports, Interests and <i>Recognition Wall</i> with options to edit or make public (e.g., Harper Davis)

1. Login



6:05



GATED

Unlock your college experience

Sign In

School Email

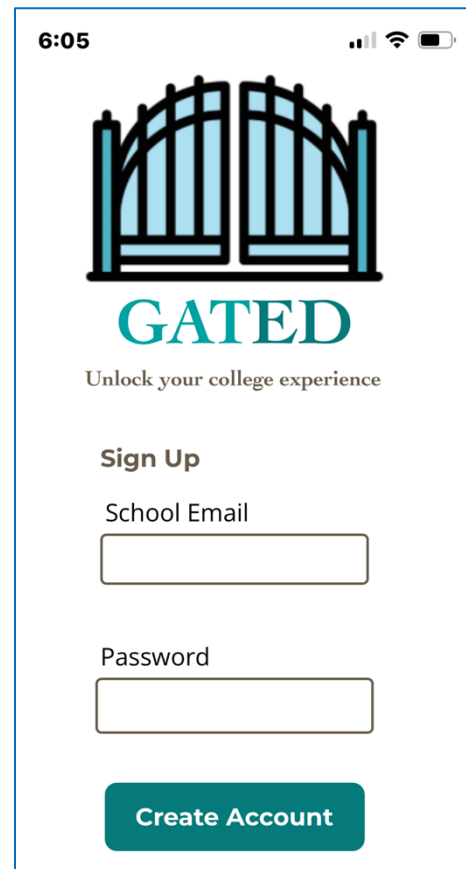
Password

Login

Create Account

Figure 7.2: *Gated Login* screen, coded version

2. Create Account



6:05



GATED

Unlock your college experience

Sign Up

School Email

Password

Create Account

Figure 7.3: *Gated Create Account* screen, coded version

3. Create Profile

Create Profile

Enter your personal and academic information to create your account. The more information you enter, the easier it will be to make connections with peers.

Name

Pronouns

Race/Ethnicity

Class Year

Major 1

- +

Concentration

Minor 1

- +

UConn Dorm

Country

State

County

City

Done

4. Enter Courses

Enter your classes for this current semester. Each class rating earns you 3 "Course" searches. Entering 4 reviews or more unlocks unlimited searches for this semester. You can always rate courses later.

Semester Year

Course Number Instructor

Rate

Course Number Instructor

Rate

Course Number Instructor

Rate

Course Number Instructor

Rate

- +

Done

Figure 7.5: *Gated Enter Courses* screen, coded version

Figure 7.4: *Gated Create Profile* screen, coded version

5. Rate a Course

←

Course Review Questions

All answers will be anonymous.

Course Evaluation

1. Please rate the difficulty level of the course?

☐ (1) Very Easy

☐ (2) Easy

☐ (3) Average

☐ (4) Difficult

☐ (5) Very Difficult

2. On average how many hours a week did you spend outside of class preparing for this course?

☐ 1-3 hours

☐ 4-6 hours

☐ 7-9 hours

☐ 10-14 hours

☐ 15+ hours

3. What is your overall rating of the course?

☐ (1) Poor

☐ (2) Fair

☐ (3) Good

☐ (4) Very Good

☐ (5) Excellent

Figure 7.6.1: *Gated Rate Course* screen continued, coded version

5. Rate a Course, continued

4. How strongly would you recommend this course to your peers?

☐ (1) Not Recommend

☐ (2) Not Likely to Recommend

☐ (3) Recommend with Concern

☐ (4) Likely to Recommend

☐ (5) Highly Recommend

Instructor Evaluation

Please state whether you agree or disagree with the following statements.

5. Instructor gave effective whole class instruction/ lectures.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

6. Instructor gave clear assignments.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

7. Instructor graded work in reasonable amount of time.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

Figure 7.6.2: *Gated Rate Course* screen continued, coded version

5. Rate a Course, continued

8. Instructor or TA was available outside of class hours.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

9. Rate your Instructor overall.

☐ (1) Strongly Disagree

☐ (2) Disagree

☐ (3) Neutral

☐ (4) Agree

☐ (5) Strongly Agree

Comments

What would you like students considering taking this course to know? Your comments will be anonymous.

What is your expected grade in the course?

Letter Symbol

Upload syllabus here (Optional)

Submit

Figure 7.6.3: *Gated Rate Course* screen continued, coded version

6. Profile Completed



Profile



Harper Davis
she/her/hers

Edit

Academics and Background Edit

Class Year: Freshman
Major: Computer Science and Engineering
Concentration: N/A
Minor: N/A
Hometown: United States, Bergen County, Hackensack, NJ
Race: African American

Clubs, Sports, and Interests Edit

UConn Marching Band

Tabletop Gaming Club

Diversabilities

Kayaking

Fine Dining

Luxury Hotels

Recognition Wall

 **Neil Nutt**

Thanks Harper for helping me with my CSE 1010 homework. You made it so easy to understand.

Public Remove

 **Abby Anderson**

Harper, it was great meeting you at the Women in Engineering Club. You are so smart.

Public Remove

 **Emily Smith**

Thanks for driving me to and from the XL Center for the basketball game. I'm glad I met someone who likes women's basketball as much as I do.

Public Remove

Sign Out

Figure 7.7: *Gated Profile Completed* screen, coded version

Login: Does student have an account?

Milton 67

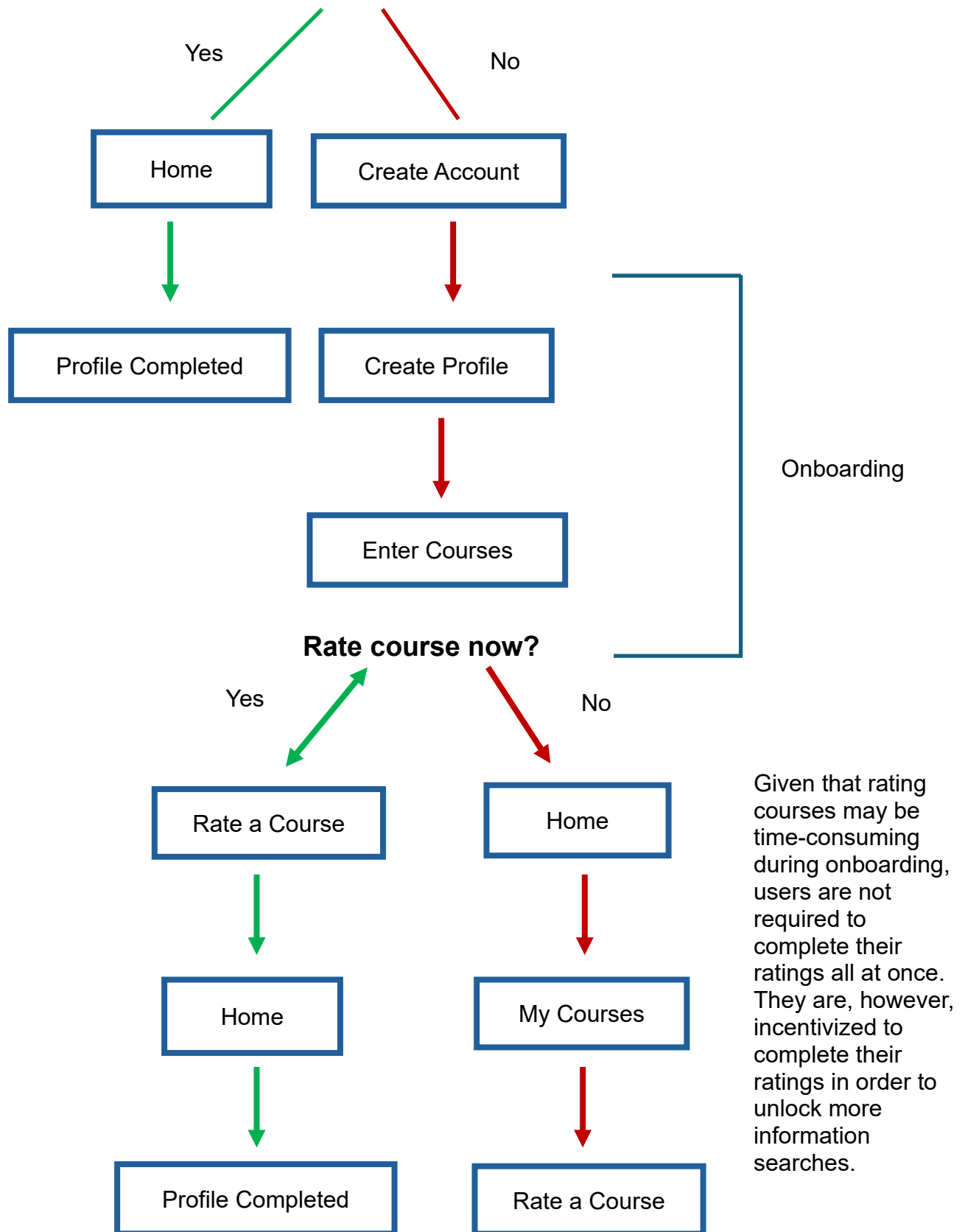


Figure 7.8: User Flow diagram for Onboarding

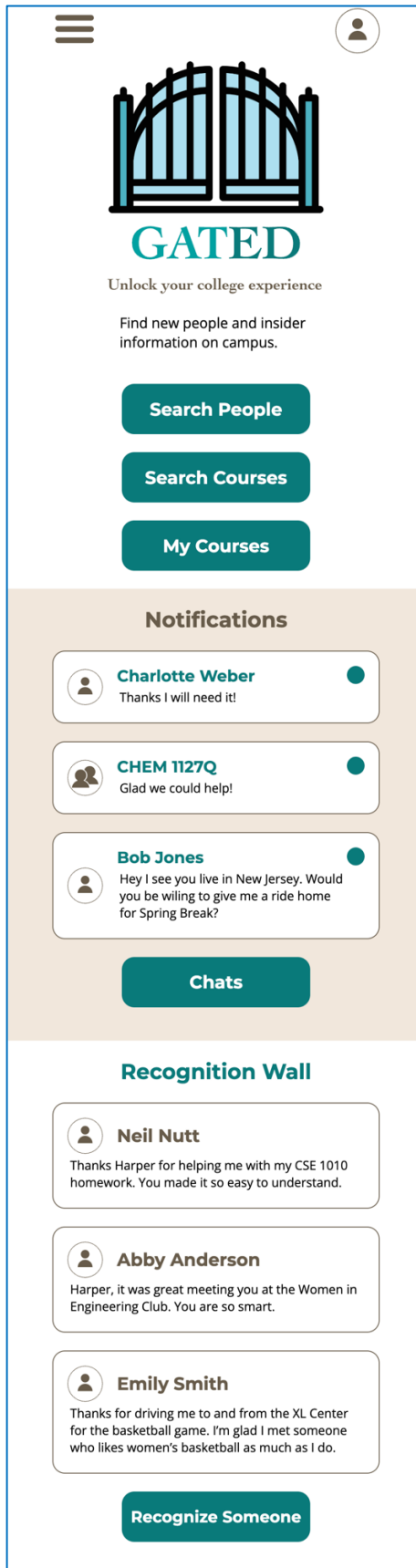


Figure 7.9: *Gated Home* screen, coded version

Home Screens

Table 7.2: *Gated Home Screens and Functions*

#	Screen Name	Function
7	Home	Search People, Search Courses, My Courses, Chat Notification feed, Recognition Wall feed. Each chat notification is clickable. Recognition Wall is Harper's (e.g., what other users are saying about her).
8	Side Menu (Hamburger)	Navigate through main features

8. Side Menu (Hamburger)

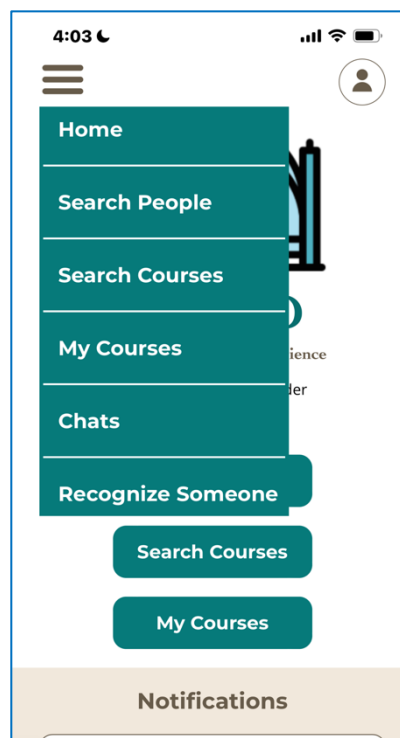


Figure 7.10: *Gated Side Menu*, coded version

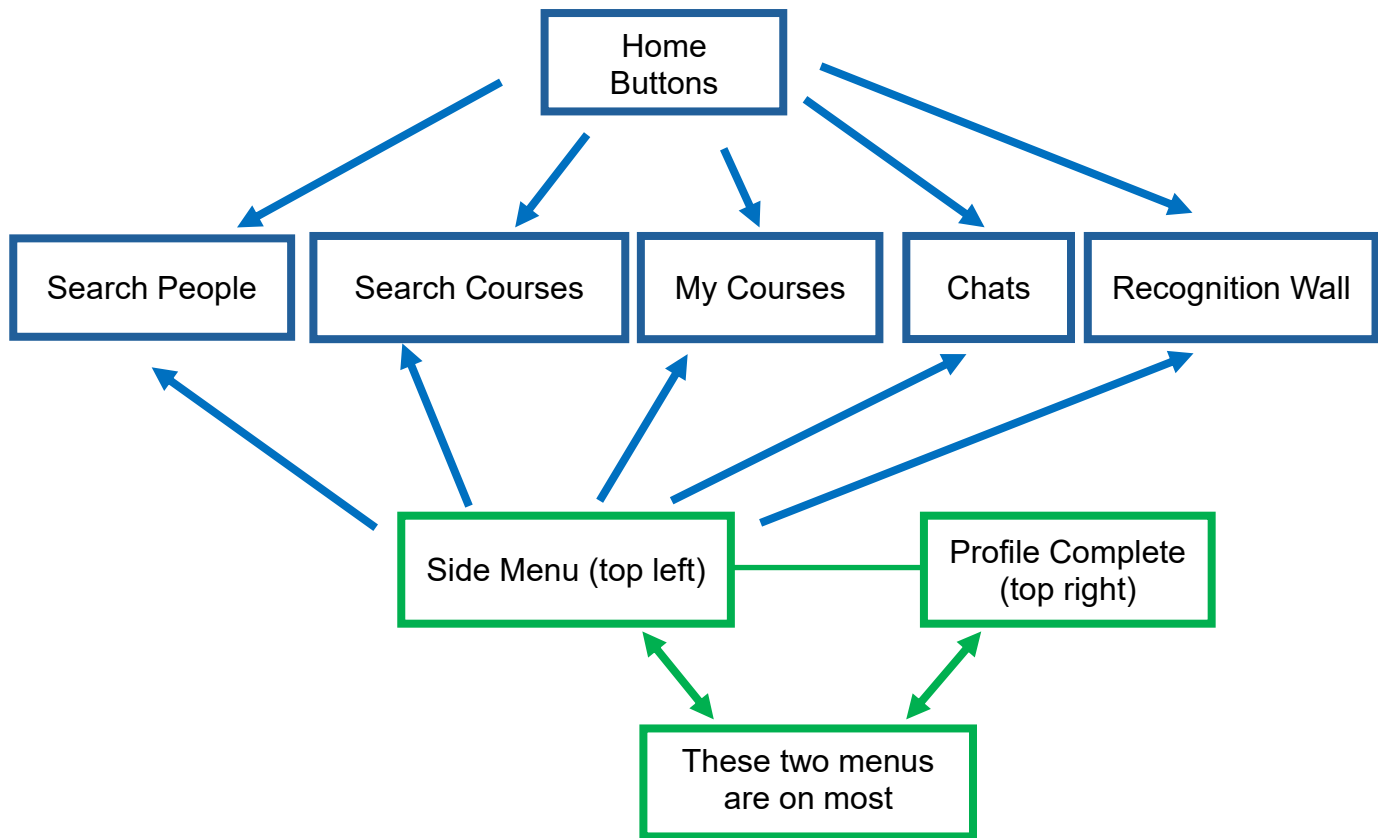


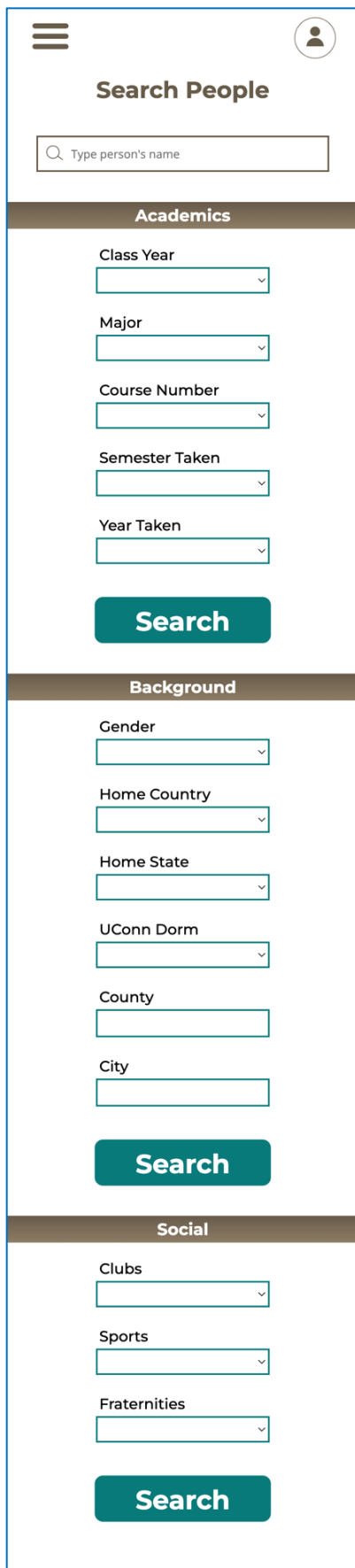
Figure 7.11: Home User Flow diagram

Search People Feature

Table 7.3: Gated Search People Screens and Functions

#	Screen Name	Function
9	Search People	Search Filters: Academics, Background, Social, can only search for one category at a time (e.g., Academics only)
10	People Search Results	Filters shown on top, results by tiles, option to create group chat or see individual profile by clicking tile (e.g., students who took CHEM 1127Q in spring of 2024)
11	Profile Result	Example of a search result contains Academics & Background, Clubs, Recognition Wall with direct message option (e.g., Charlotte Weber)

9. Search People



Search People

Type person's name

Academics

Class Year

Major

Course Number

Semester Taken

Year Taken

Search

Background

Gender

Home Country

Home State

UConn Dorm

County

City

Search

Social

Clubs

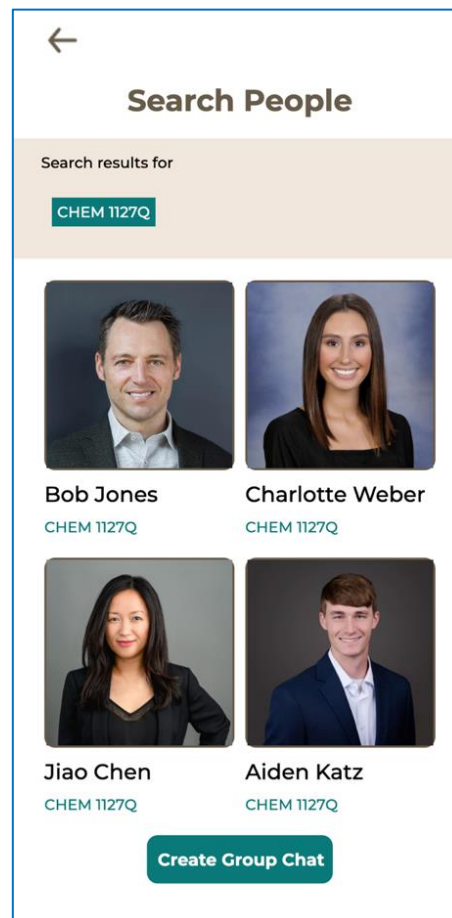
Sports

Fraternities

Search

Figure 7.12: Gated Search People screen, coded version

10. Search People Results



Search People

Search results for

CHEM 1127Q

Bob Jones

Charlotte Weber

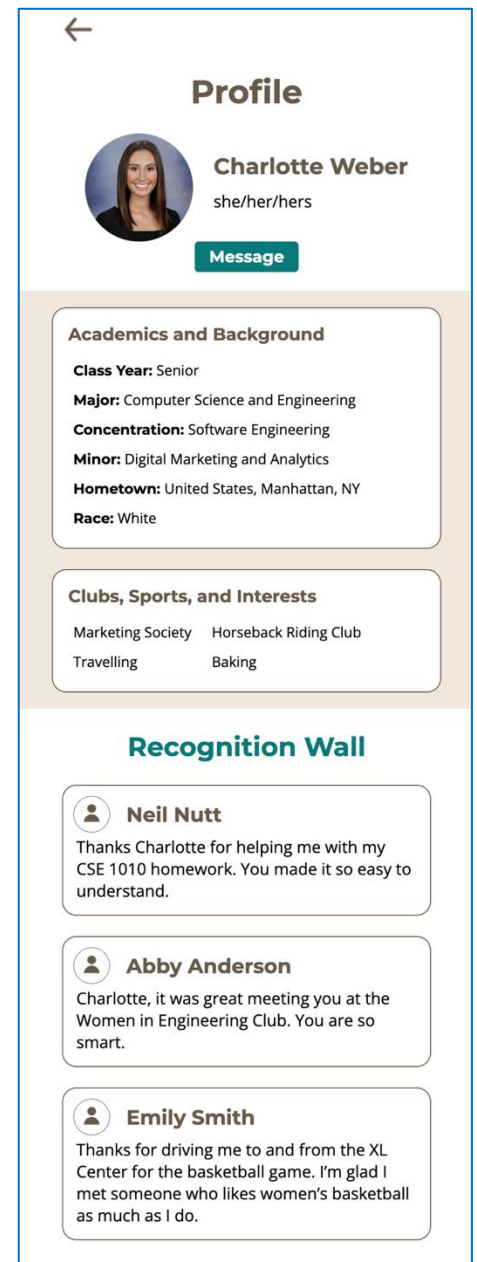
Jiao Chen

Aiden Katz

Create Group Chat

Figure 7.13: Gated Search People Results screen, coded version

11. Profile Result



Profile

Charlotte Weber

she/her/hers

Message

Academics and Background

Class Year: Senior

Major: Computer Science and Engineering

Concentration: Software Engineering

Minor: Digital Marketing and Analytics

Hometown: United States, Manhattan, NY

Race: White

Clubs, Sports, and Interests

Marketing Society Horseback Riding Club

Travelling Baking

Recognition Wall

Neil Nutt

Thanks Charlotte for helping me with my CSE 1010 homework. You made it so easy to understand.

Abby Anderson

Charlotte, it was great meeting you at the Women in Engineering Club. You are so smart.

Emily Smith

Thanks for driving me to and from the XL Center for the basketball game. I'm glad I met someone who likes women's basketball as much as I do.

Figure 7.14: Gated Profile Result screen, coded version

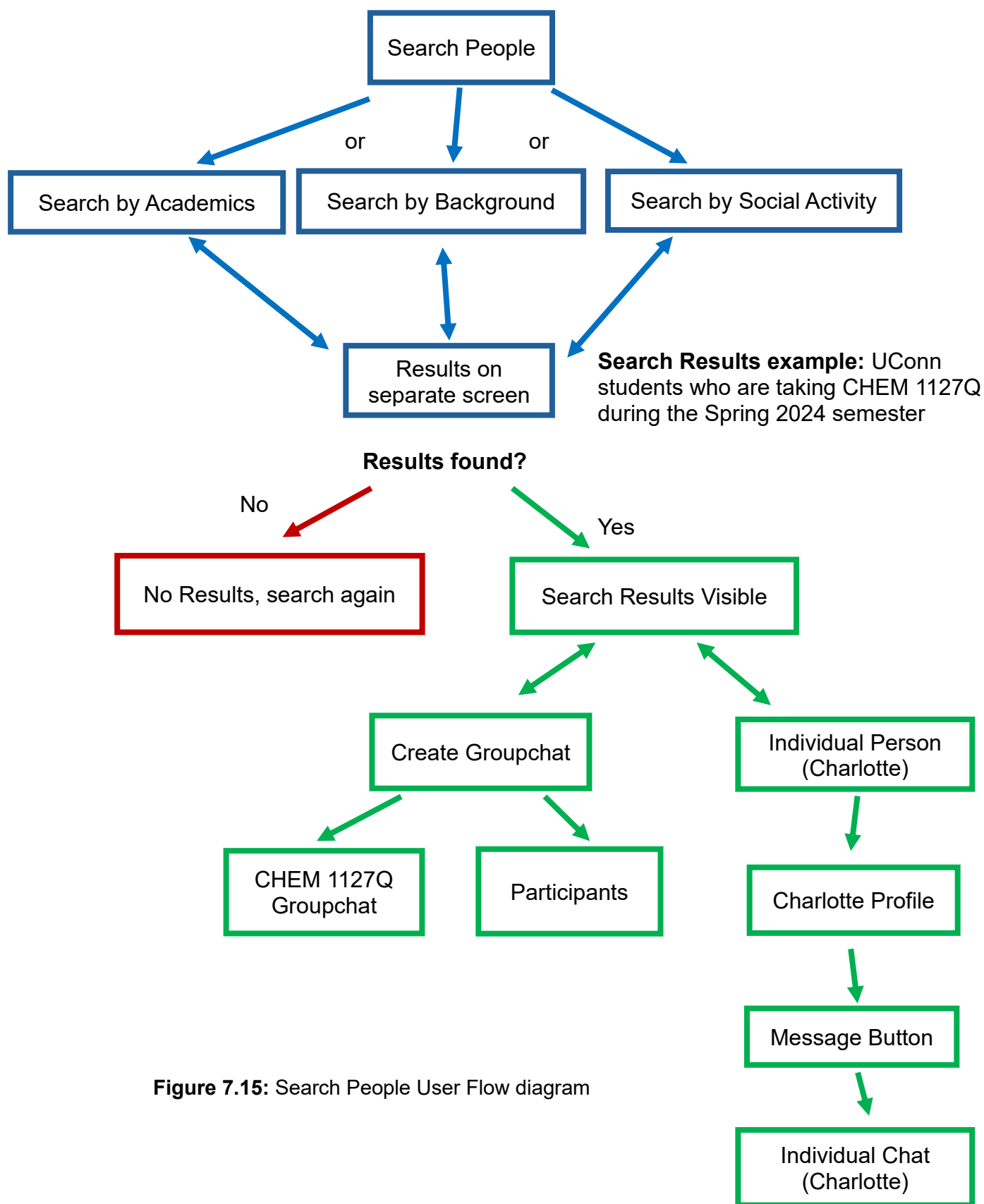


Figure 7.15: Search People User Flow diagram

Search Courses Feature

Table 7.4: Gated Search Courses Screens and Functions

#	Screen Name	Function
12	Search Courses	Search by course number or instructor
13	Course Search Results	Professor results, option to go to <i>Professor Summary Page</i> by clicking on their name.
14	Professor Summary	Course and Professor Reviews summary page (student ratings, comments), option to view full ratings and view the syllabus.
15	Full Ratings (ex: Prof. Howell Evaluation)	See Howell results of 9 questions - histograms

12. Search Courses

Figure 7.16: Gated Search Courses screen, coded version

13. Course Search Results

Figure 7.17: Gated Course Search Results screen, coded

14. Professor Summary

Figure 7.18: Gated Professor Summary screen, coded version

15. Professor Full Ratings

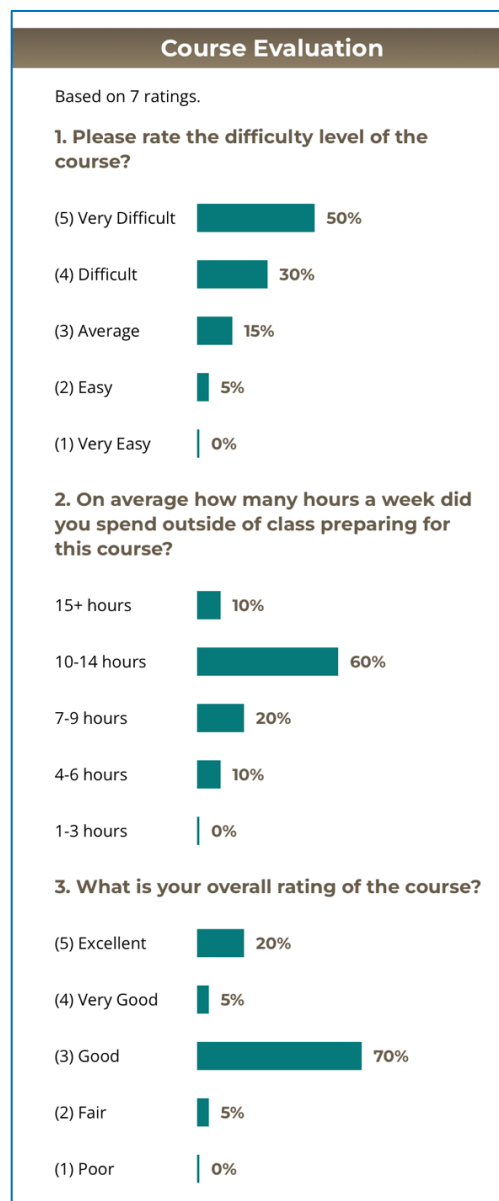


Figure 7.19.1: *Gated Professor Full Ratings* screen, coded version

15. Professor Full Ratings cont'd

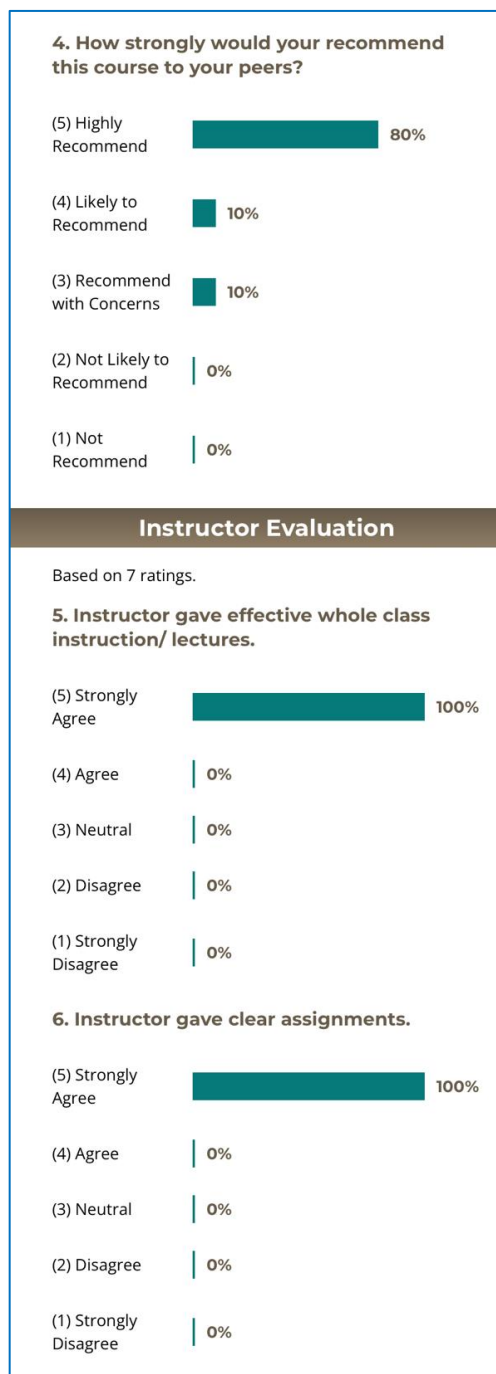


Figure 7.19.2: *Gated Professor Full Ratings* screen continued, coded version

15. Professor Full Ratings cont'd

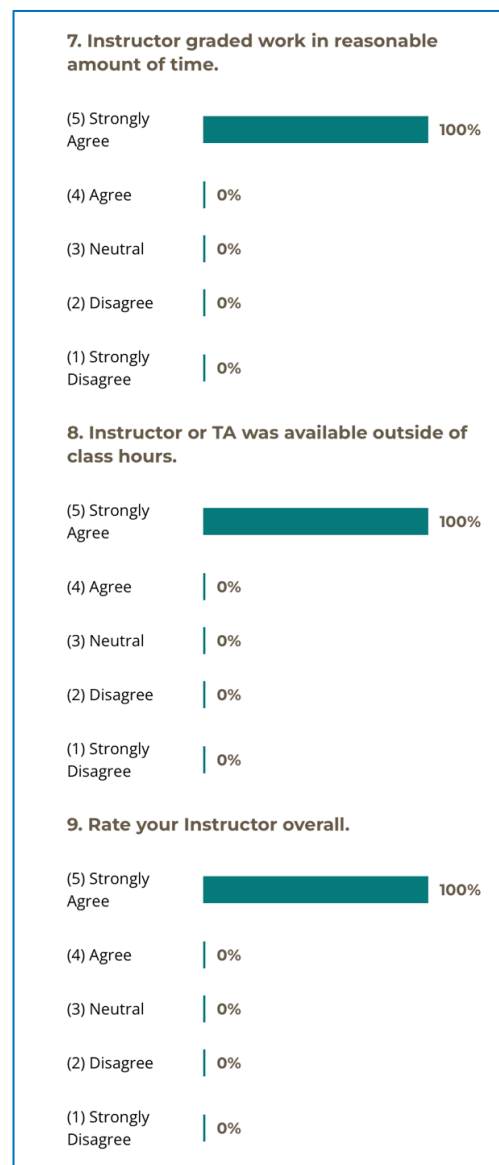


Figure 7.19.3: *Gated Professor Full Ratings* screen continued, coded version

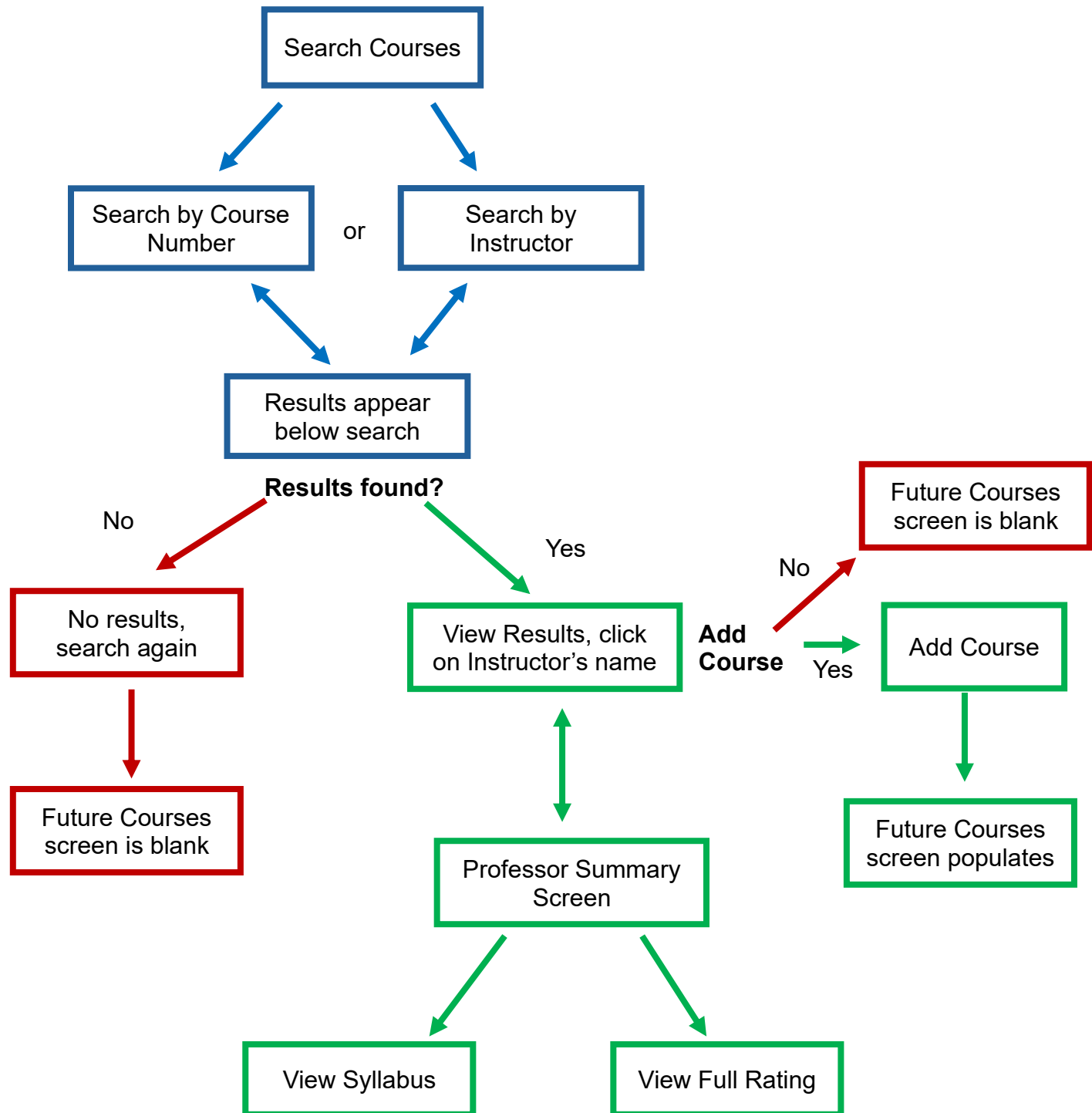


Figure 7.20: Search Course User Flow diagram

My Courses Feature

Table 7.5: Gated My Courses Screens and Functions

#	Screen Name	Function
16	My Courses	Shown by semester with rating status, Future Courses being considered, option to rate

This feature changed significantly from the design in Figma to the coded version. As I tested the screen on different phone sizes, I found the chart was collapsing on smaller phone screens. I changed the layout to tiles to make it more responsive so that the text could wrap within the tile. This adaptive approach meant that the font size did not need to be reduced significantly for a responsive final product.

16. My Courses

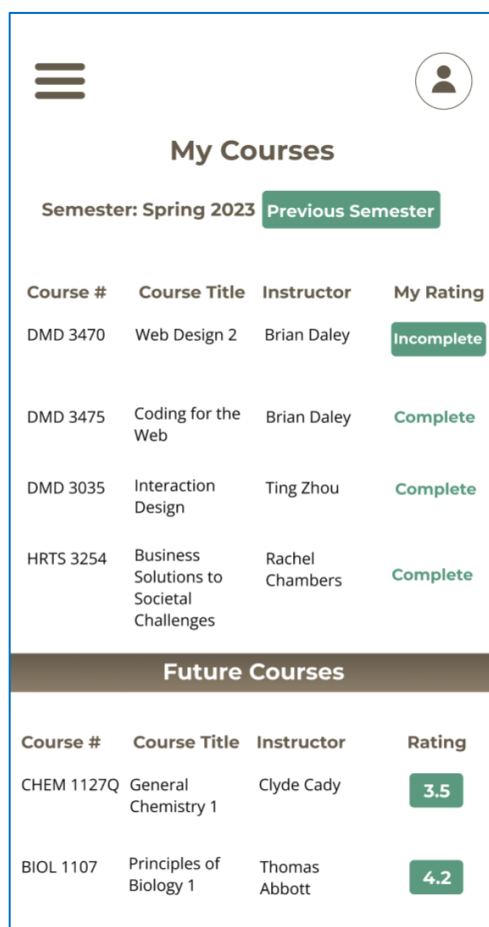


Figure 7.21: Gated My Courses screen, Figma version

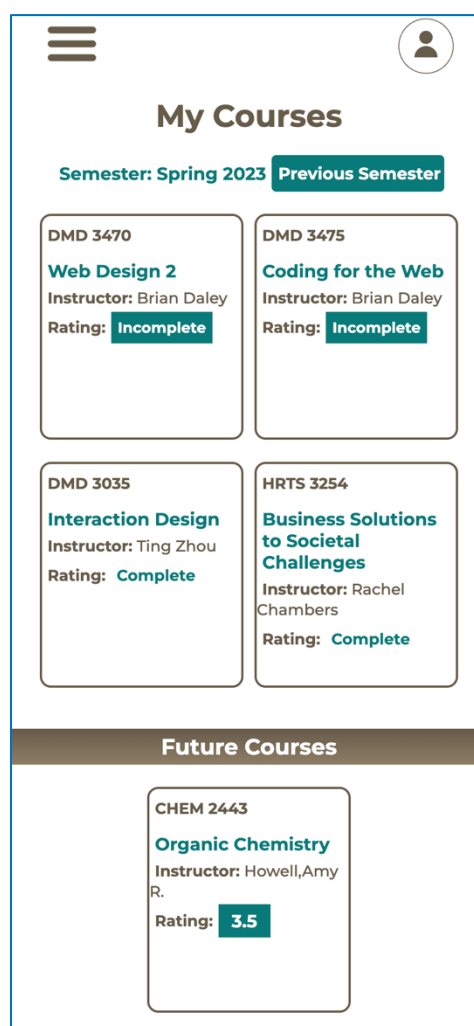


Figure 7.22: Gated My Courses screen, coded version

Chat Feature

Table 7.6: *Gated Chat* Screens and Functions

#	Screen Name	Function
17	Chats	Option to create chats (individual or group) and view current chats
18	Individual Chat	Example of private individual message from Harper to Aaliyah
19	Group Chat Participants	Example list of CHEM 1127Q students in class participating in a Group Chat
20	Group Chat Active Discussion	Example of student discussion for CHEM 1127Q (e.g., Harper initiates group chat)

17. Chats

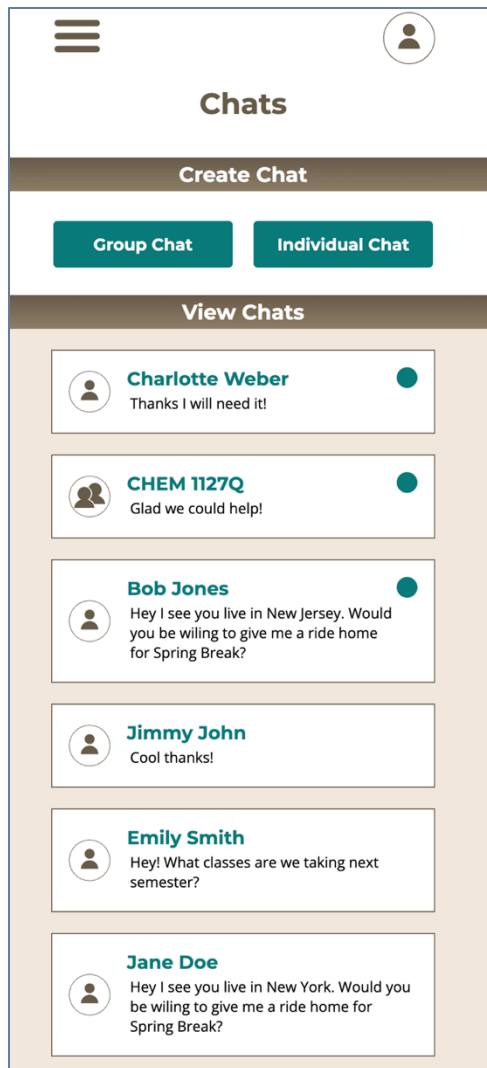


Figure 7.23: *Gated Individual Chat* screen, coded version

18. Individual Chat

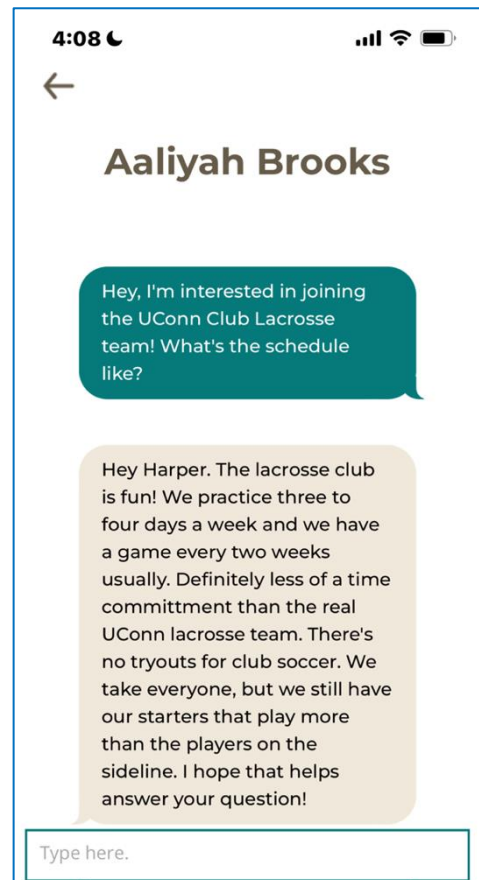


Figure 7.24: *Gated Individual Chat* screen, coded version

19. Group Chat Participants

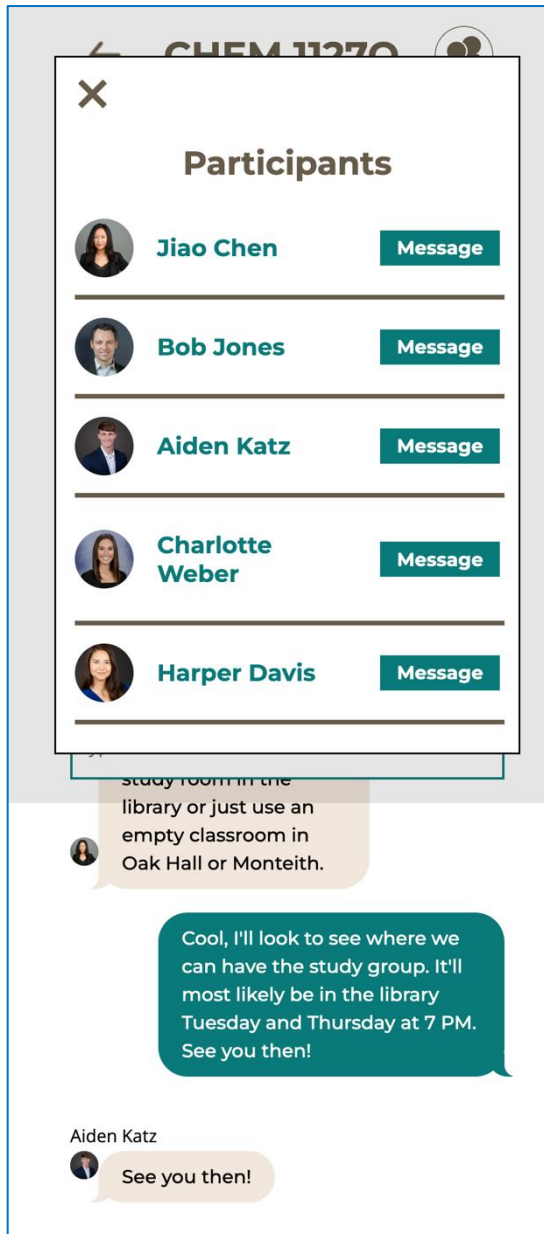


Figure 7.25: *Gated Group Chat Participants* screen, coded version

20. Profile Group Chat Active Discussion

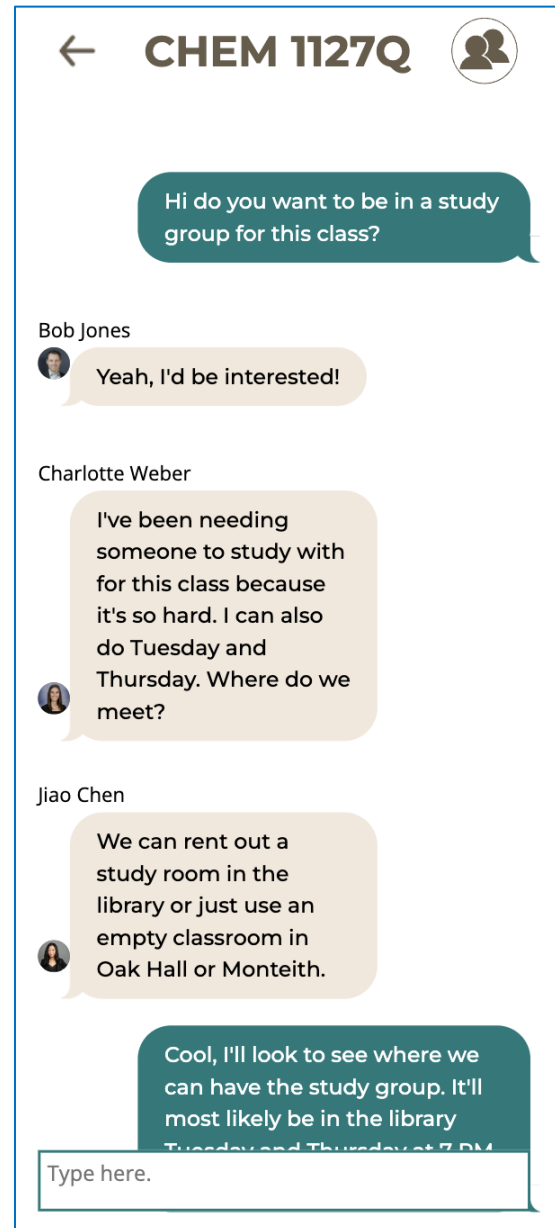


Figure 7.26: *Gated Group Chat Active Discussion* screen, coded version

Recognition Wall Feature

Table 7.7: Recognition Wall Screens and Functions

#	Screen Name	Function
21	Recognize Someone	Student recognizing someone for their help by posting to their wall (e.g., Harper's screen)

21. Recognize Someone

Post to Recognition Wall

Harper Davis
Type here.

Add Image **Public**

Post

Who You Recognized

Emily McMahon
Thanks Emily for telling me about your CHEM 1127Q TA. I ended up taking the class with him and he is very helpful!

Jimmy John
Thanks for helping me decide which CHEM discussion section to take. Without your help, I don't think I'd be getting an A-right now!

Mikaela Hunt
Thanks for telling me about the DMD Web Design major. I found out that I got accepted!

Figure 7.27: Gated Recognize Someone screen, coded version

Link to *Gated*: Figma Prototype

Gated Final Design: <https://www.figma.com/file/qozV3CFjZ84RObfAiz5joa/Gated-Final-Design?type=design&node-id=0%3A1&mode=design&t=R8IP1LnuPAMBdZ6C-1>

The process of making all the small decisions that added up to the final design helped to solidify *Gated*'s appearance and feel. The app needed a clean look to convey the open spaces and be easy to use. Prototyping in Figma was beneficial because I could click through the app and ensure the user did not get stuck anywhere in the navigation. Mapping the user flows in diagrams demonstrated that the app had flexibility: there is more than one way to rate a course, view a chat, and view professor ratings depending on the user's actions. Giving the user multiple ways to get information was necessary so that the user was always in the driver's seat. Breaking down the Figma prototype into smaller parts would be essential in the development process.

Section 8: Coding the App

Many programming languages were used to make *Gated* function. The front end, or what the user sees, was built with HTML (Hypertext Markup Language), CSS (Cascading Style Sheets), and JavaScript. All of the logic behind the scenes, or the back-end, was coded in ExpressJS, Nunjucks templating language, and a PostgreSQL database.

From Figma Prototype to Interactivity

The Figma prototype had a few interactive features such as drop-down menus and navigation menus, but the coded version expanded on those ideas and allowed the user to do more. For example, in the Figma version, the user could not add or delete majors because the buttons (add and minus symbols) did not work. The buttons became operational in the coded version.

The onboarding screen contains the following elements:

- Name:** A text input field.
- Pronouns:** A dropdown menu.
- Race/Ethnicity:** A dropdown menu.
- Class Year:** A dropdown menu.
- Major 1:** A dropdown menu.
- Major 2:** A dropdown menu.
- Buttons:** Two circular buttons, one with a minus sign (-) and one with a plus sign (+), located below the major selection fields.
- Concentration:** A dropdown menu.
- Minor 1:** A dropdown menu.

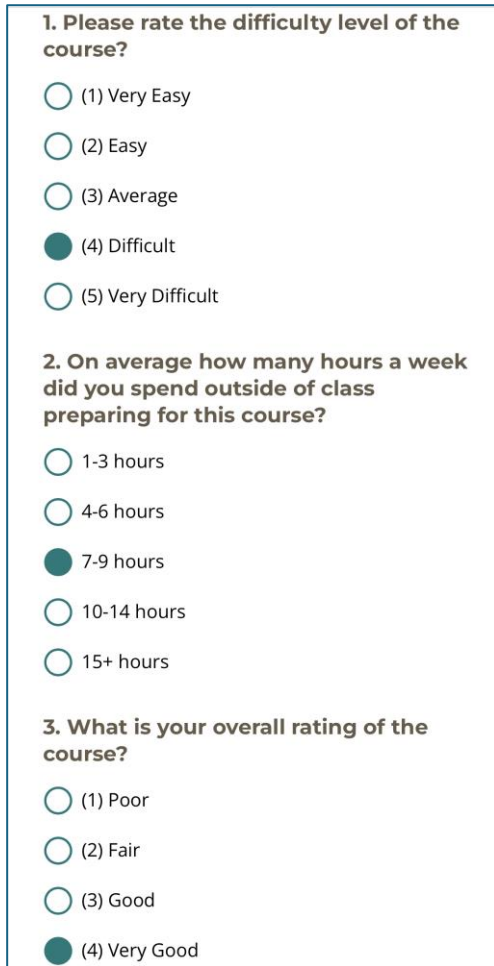
Figure 8.1: Onboarding screen shows add/ minus buttons for majors. Now there are two majors instead of one.

The Enter Courses screen contains the following elements:

- Course List:** A list of five courses, each with a "Course Number" dropdown, an "Instructor" dropdown, and a "Rate" button.
- Buttons:** Two circular buttons, one with a minus sign (-) and one with a plus sign (+), located at the bottom of the course list.
- Done Button:** A large teal button labeled "Done" at the bottom of the screen.

Figure 8.2: Enter Courses screen shows add/ minus buttons for courses. Now there are seven courses instead of five.

Not all answer choice buttons were operational in the Figma version, but on the coded version, all answer choice buttons became functional. In the Figma prototype, users could not type into the app using the keyboard. The coded version, however, would allow the user to type directly into the app as expected. Coding all these tasks was necessary to give the user a more genuine experience of how the app would work.



1. Please rate the difficulty level of the course?

- ☐ (1) Very Easy
- ☐ (2) Easy
- ☐ (3) Average
- ☒ (4) Difficult
- ☐ (5) Very Difficult

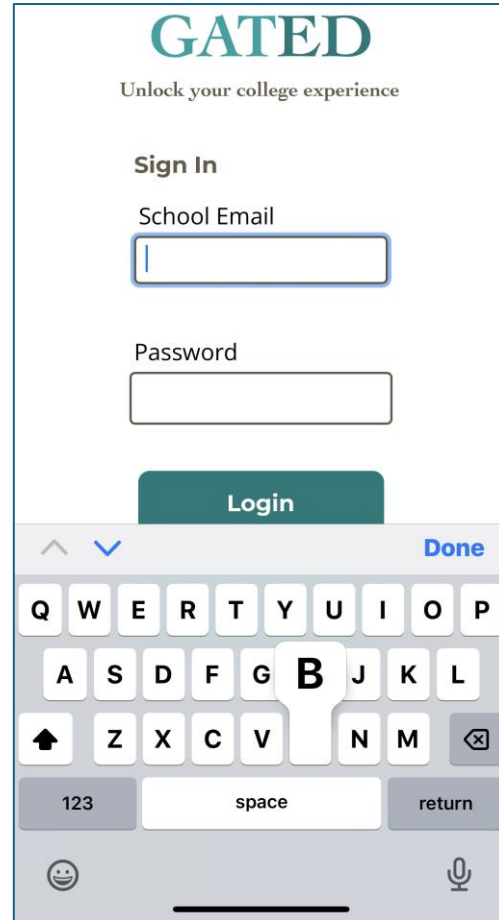
2. On average how many hours a week did you spend outside of class preparing for this course?

- ☐ 1-3 hours
- ☐ 4-6 hours
- ☒ 7-9 hours
- ☐ 10-14 hours
- ☐ 15+ hours

3. What is your overall rating of the course?

- ☐ (1) Poor
- ☐ (2) Fair
- ☐ (3) Good
- ☒ (4) Very Good

Figure 8.3: *Rate a Course* screen shows multiple choice buttons working



GATED
Unlock your college experience

Sign In

School Email

Password

Login

Done

Q W E R T Y U I O P
A S D F G B J K L
↑ Z X C V N M ↵
123 space return
😊 🗣️

Figure 8.4: *Log In* screen shows keyboard working

Loading Real UConn Data

The coded version of the app was only possible with the help of the UConn Registrar and the Department of Student Activities. Finding and typing this data manually would

have been an overwhelming task. UConn departments graciously provided spreadsheets with the following up-to-date data:

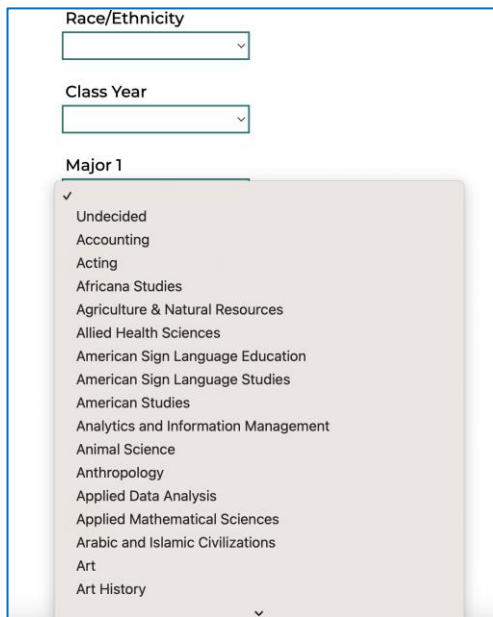
1. UConn Academic Data

- a. Majors
- b. Major Concentration (e.g., Web Design within DMD)
- c. Minors
- d. Course numbers by Department
- e. Professor names

2. UConn Social Data

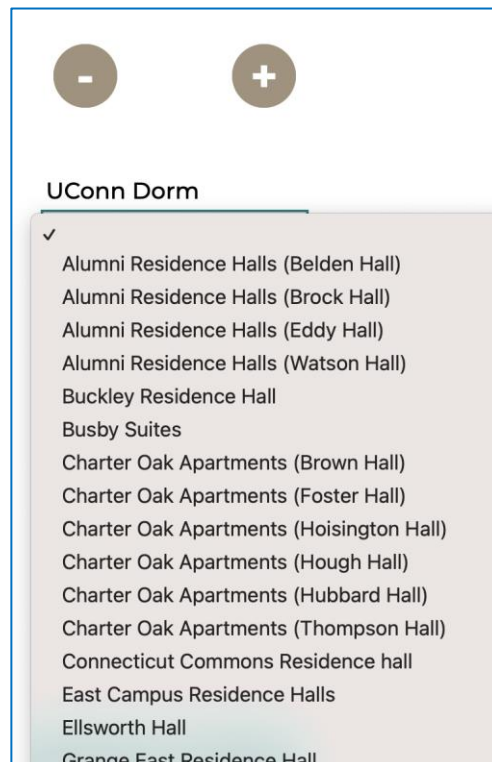
- a. Clubs
- b. Sports
- c. Fraternities
- d. Sororities

Once the spreadsheets were received, they were imported into the PostgreSQL database and loaded into *Gated*. This UConn data and publicly available data, such as US states and countries, comprised nine tables in the database. The outcomes are shown below in Figures 8.5 through 8.10.



The screenshot shows a mobile application interface with three dropdown menus. The first menu is labeled 'Race/Ethnicity' and has a downward arrow. The second menu is labeled 'Class Year' and also has a downward arrow. The third menu is labeled 'Major 1' and is currently open, displaying a list of majors including Undecided, Accounting, Acting, Africana Studies, Agriculture & Natural Resources, Allied Health Sciences, American Sign Language Education, American Sign Language Studies, American Studies, Analytics and Information Management, Animal Science, Anthropology, Applied Data Analysis, Applied Mathematical Sciences, Arabic and Islamic Civilizations, Art, and Art History. A checkmark is visible at the top left of the major list.

Figure 8.5: Onboarding screen shows functional Majors drop-down



The screenshot shows a mobile application interface with a dropdown menu titled 'UConn Dorm'. Above the menu are two circular buttons, one with a minus sign and one with a plus sign. The dropdown menu is open, displaying a list of dorms including Alumni Residence Halls (Belden Hall), Alumni Residence Halls (Brock Hall), Alumni Residence Halls (Eddy Hall), Alumni Residence Halls (Watson Hall), Buckley Residence Hall, Busby Suites, Charter Oak Apartments (Brown Hall), Charter Oak Apartments (Foster Hall), Charter Oak Apartments (Hoisington Hall), Charter Oak Apartments (Hough Hall), Charter Oak Apartments (Hubbard Hall), Charter Oak Apartments (Thompson Hall), Connecticut Commons Residence hall, East Campus Residence Halls, Ellsworth Hall, and Grange East Residence Hall. A checkmark is visible at the top left of the dorm list.

Figure 8.6: Onboarding screen shows functional UConn Dorm drop-down

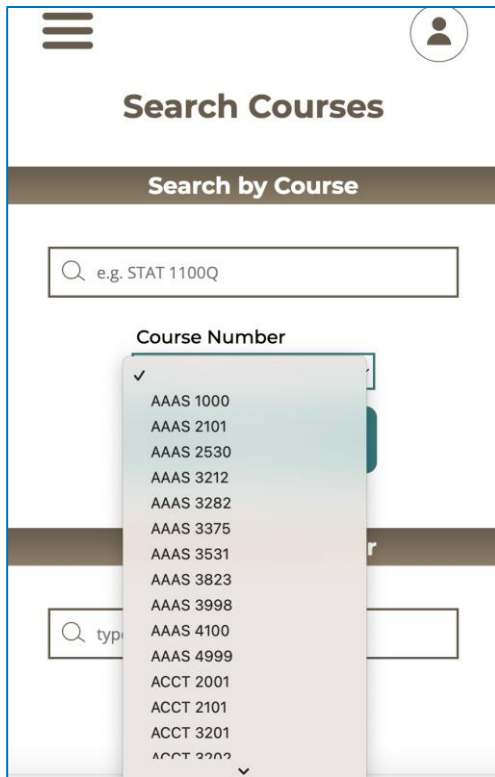


Figure 8.7: *Search Courses* screen shows functional course number drop-down

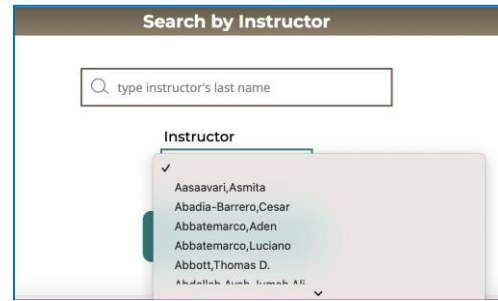


Figure 8.8: *Search Courses* screen shows functional Instructor name drop-down

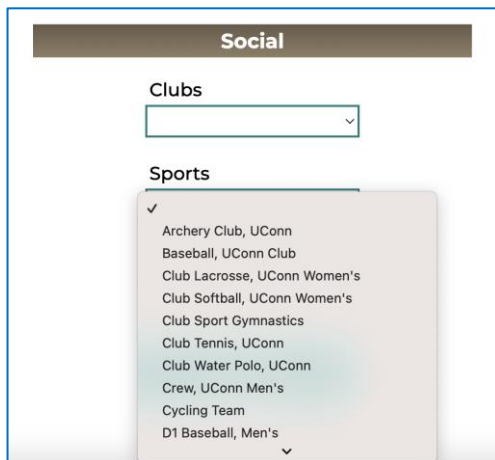


Figure 8.9: *Search People* screen shows functional Sports drop-down

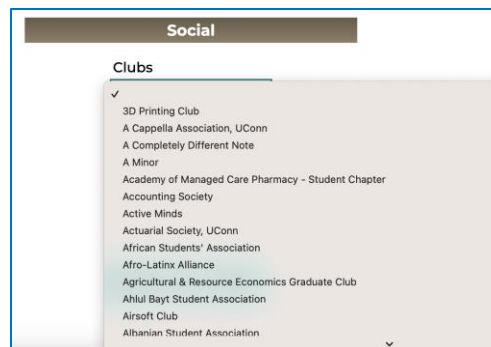


Figure 8.10: *Search People* screen shows functional Clubs drop-down

Links to *Gated*: Coded Version

Below are the links to the coded version of *Gated*:

- *Gated* - Unlock your College Experience: <https://gated.onrender.com/>
- GitHub Repository: <https://github.com/jillian-milton/gated>

Operational Features

Currently, *Gated* has the following operational features: [Search Courses](#), adding a course to [Future Courses](#), and [Search People](#) (search by name and academics only). [Search People](#) by background and clubs returns static pages related to that theme. Due to time constraints or lack of data, some features could not be finalized. Features requiring further work include onboarding screens, a Professor Summary with actual rating results, uploading and viewing an authentic syllabus, a [Search People](#) results screen, chats, and a [Recognition Wall](#).

Gated is not fully operational because the login and onboarding process requires finalization. I loaded dummy data for demonstration purposes into the [Search People Results](#) screen, the [Professor Summary](#) screen, and the [View Full Results](#) screen. Although I had the technical skills to make the [Recognition Wall](#) functional, I chose to dedicate time to more critical app features. Overall, the coded version of *Gated* is more of a proof of concept than a real-working app since some outstanding features still need to be operationalized.

I learned a lot about the software development process and how much effort goes into developing each feature. Seeing *Gated* come to life was both satisfying and exciting! My vision remained true to the original design as some of the *Gated* features proceeded from the Figma prototype to a functioning phone app. As each feature became functional with the coded version, the user experience transitioned from idea to reality.

Section 9: Conclusion

Applying Design Thinking to Solve Real Problems

I began this project in the fall of 2023, believing there had to be a better way for college students to make social connections. My project took a significant pivot as I tested this hypothesis with a large-scale survey of 301 students. I listened to my peers and learned more about their academic needs regarding information, guidance, and mentorship which were not addressed by current apps. I used the design thinking principles outlined by Stanford University's Hasso Plattner Institute of Design, as shown in Figure 9.1, to develop a framework to solve the problem.

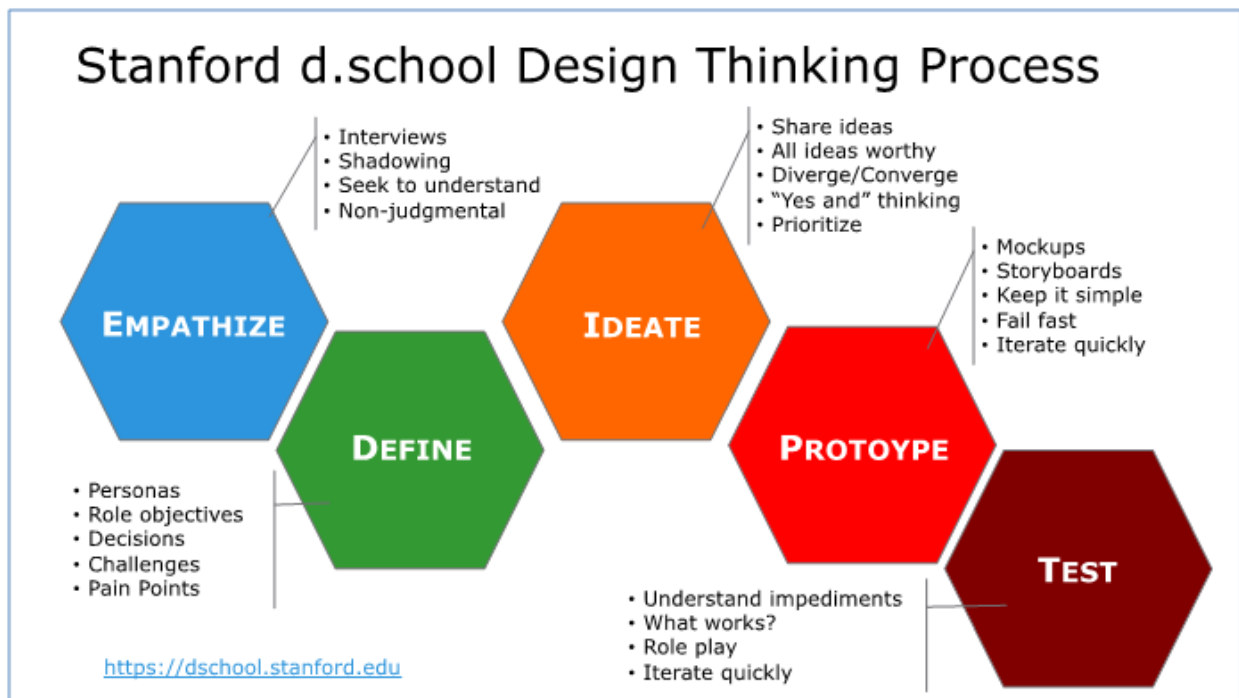


Figure 9.1: Diagram of the Design Thinking Process (Terrar and Reed)

From inception, I wanted to create a user experience for students that would build community. The need had to be authentic and not based upon conjecture or assumptions. It had to be confirmed, validated, and quantified objectively through data. As I went where the information led me, the project evolved from a social to an academic app. Table 9.1 shows how my project followed the stages of the Stanford Design School's design thinking process to arrive at a final product that would be relevant and useful to students.

Table 9.1: Design Thinking Process used to develop *Gated*

Stage	Thesis Application
Empathize	App audit phase examined all the needs students have and how they are using apps
Define	- Developing and analyzing the survey data to quantify needs - Understanding why an academic app was needed - Creating user personas
Ideate	- Drawing wireframes in Notability, an iPad sketch app - Wireframing in Figma - Designing the information architecture - Designing the navigation structure
Prototype	- Figma design with color palette and typography - Coded version with front-end/ back-end and functional interactive features
Test	Not completed

As I wrap up this project, I would like to reflect on some of the main takeaways, key learnings, and remaining questions.

Explaining the Need for an Academic App

UConn is a large university with many choices

UConn is undeniably a large university with over 32,000 students across all campuses. UConn's size is a strength since students can pick from 131 majors and 127 minors. Students have so many choices and can specialize or concentrate even within fields. With hundreds of courses, students need much information to navigate decisions and the systems. Initially, I theorized that the freshman in my sample (42% of total students)

were driving up the need for an academic app. Perhaps freshmen wanted a UConn academic app more than a social one because they were at a critical juncture in their decision-making process. Were they feeling pressure to decide about their majors more than upperclassmen? After diving into the survey data, the class year breakdown showed that seniors felt the greatest need for an academic app: 73% of seniors wanted an academic app compared to 61% of freshmen. This was a surprising finding since one would assume pressing academic inquiries about fields of study and course plans have been settled by senior year. Had the survey sample been more representative or weighted by class year, the percentage of those wanting an academic app would have been even higher.

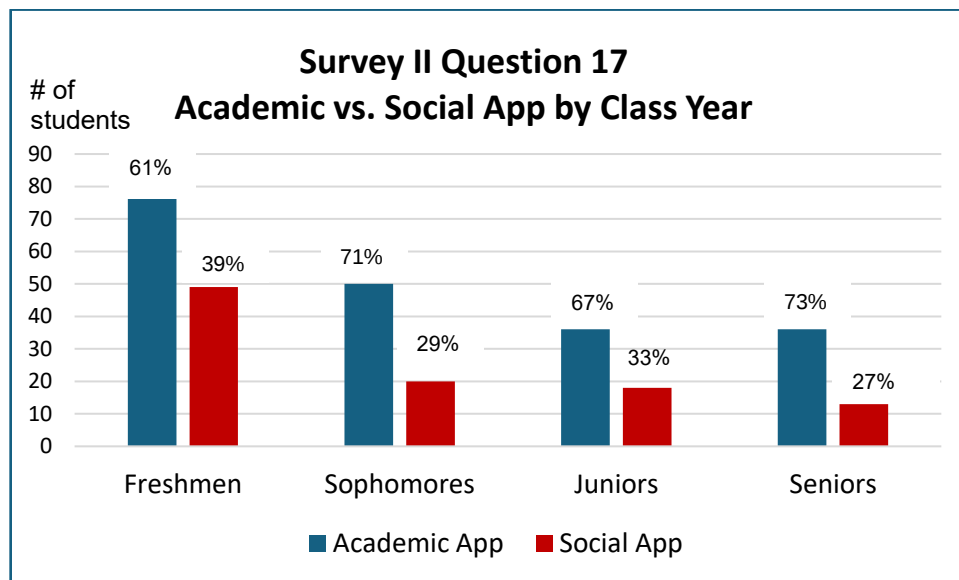


Figure 9.2: Academic App vs. Social App Survey II Results by Class Year

Other theories emerged to explain these numbers. Perhaps seniors have met their social needs and are more focused on meeting their academic needs as they transition to life beyond college. Could freshmen still be in an exploratory phase and have yet to experience the barriers and challenges ahead? Do seniors have more experience and the benefit of hindsight? With a more critical perspective, seniors may be expressing that they wish they had more information, guidance, and mentorship while navigating these academic decisions.

Students want more information post-COVID

Another reason students may want an academic app over a social one is because my peers are part of the first post-COVID generation. During the pandemic, some students struggled with virtual classes and realized that they learned better in person. Some students want smaller classrooms with whole-class instruction. On the other hand, some students discovered they prefer watching recordings of in-person classes. While

still others prefer synchronous or asynchronous online learning. Students who experienced the pandemic may have become more self-aware about their unique learning preferences. With this knowledge and more class format offerings, students may want more information about the particulars.

Students need more data about professors and courses

Given that a large university offers choices, students may want more information about how professors teach. Is it a flipped classroom? How available is the professor during office hours? What is the grading system? How many papers or problem sets are to be submitted? Are there online curriculum tools such as publisher tools or simulations? Which teaching assistant's style will work best for them?

Some colleges, such as Harvard and Georgia Tech, offer students more robust information to make these decisions. These institutions publish their professor and course review data so that students can make informed decisions. UConn has the benefit of years' worth of SET data. They could make some of this data available to students so that they have more agency in their academic journeys. If SET data were preloaded into *Gated*, students would be highly incentivized to use the app. It would be a boon to fostering a thriving academic-interest-based college community.

Follow up research would need to be conducted to truly understand specifically what is driving the high need for an academic app at UConn. Understanding these more specific needs could be the basis for more features in the app, but they would not change the main information architecture of *Gated*. Despite not having all the answers, the fact that students expressed a high need for an academic app is incontrovertible.

Students want peer guidance and mentorship

The survey revealed a strong desire for peer guidance and mentorship. There are several reasons why peer mentoring at the collegiate level may be a need. Students are more likely to trust other peers that have been through the same course registration process than their advisor or department head. Advisors are human and can make mistakes. There were several posts during my app audit where students had to change their course sequencing, take a summer course, or stay an extra semester due to not being able to get into a critical class. Regardless of the origin of these errors, not getting into a crucial class is costly both in time and finances. With a peer network, students can feel more confident as they can validate information from multiple sources.

Peer mentoring also has benefits for both parties involved. The mentor gains leadership experience by assisting a younger student, and the mentee gains invaluable knowledge and a role model. Mentoring a peer in college inspires both the mentor and the mentee to "pay it forward" thereby creating a positive, supportive culture (Freed). Creating mentoring relationships that focus on academic identity first (same major, taking the

same course) can lead to social benefits. *Gated* can support these connections through the majors/ minors filters, as well as through some of the social filters such as race or dorm. For example, using *Gated*, students could form a group as specific as “Women of Color who are Engineering majors.” When individuals form mentor and mentee bonds, the mentee can more quickly understand the structure of organizations on campus. For example, at the University of Texas at Dallas (UTD), there is a peer-mentoring program for every major: upperclassmen are available to help freshmen with academics and student-life questions (“Field Notes”). *Gated* provides the space for students to find mentors and mentees informally. Collegial connections rooted in academic interests can become a jumping-off point for meaningful in-major, in-person mentoring that can lead to friendships.

The Benefits of a Closed College Community

Deciding to make *Gated* a closed community was central to the unique identity of the app. According to the survey, students thought that existing apps like *Rate My Professor* were too public and there needed to be more UConn students on the platform. Sharing specific information about academics is also not appropriate on many other UConn channels and public pages. The closed community model is so central to the app that it inspired the name and logo to convey safety and exclusivity. Students who sign up for *Gated* are invested in their academics and may be more likely to share their expertise with other students. Exclusivity attracts expertise (Jaworski).

Gated’s login screen will only allow users with UConn emails, or in the future, NetID’s. Students can safely converse with real, verified students and not persons with no context of their circumstances. *Gated* does not encourage anonymity like the *Fizz* model. The only place for anonymity is in the course comments area so that students will be safe to speak up. The closed community model allows students to share their feelings about their academic concerns. This peer support is invaluable when navigating complex decisions that impact their futures. Studies show that closed communities exchange more genuine content and have higher engagement rates than public communities (Kishore). Persons who contribute content online feel a rush of dopamine, knowing their engagement is rewarded through “likes” and “upvotes” (“The Psychology of Being ‘liked’ on Social Media”). *Gated* will reward engagement with the [Recognition Wall](#) feature and the ability to upvote professor review comments.

Why *Gated* is a better alternative than existing apps

Based on my review of existing apps, there is no other offering like *Gated*. Finding students by major is a filter that is available on *ZeeMee* and *HuskyLink*. Since *ZeeMee* has a recruitment focus and is open to the public, college students do not necessarily want to be active in a community with high school students who have very

different concerns. *HuskyLink* offers connections to alums by major in a closed community, which is valuable for career exploration. Yet this does not satisfy students' need to meet near peers who attend the same classes or campus.

No other app also allows students to create group chats by class. At present, students are reliant on existing channels in *Slack* or *Discord* created by faculty. *Gated* would empower students to find and build communities among their classmates for support. Currently, students must meet in person, then create group chats based on common interests. No other app allows students to meet other students by dorm, hometown, or club filters like *Gated*.

Gated could improve upon the weaknesses of *Rate My Professor* and bring a level of interactivity that is not available on that website by allowing students to upvote reviews and search by course and by students who have taken a class. Given these unique features, *Gated* is unlike any existing academic app.

Next Steps

The next step for *Gated* would be user testing on the coded prototype to obtain feedback. Upon completing the Figma prototype, I initially wanted to test *Gated* but decided against it because I felt the user would be frustrated with the lack of operational features. I decided that a coded version would help the user understand the experience better and could provide more meaningful information. Testing the coded version would ask users to perform specific actions on the app, such as “rate a course,” “view professor ratings,” and “search for students within a major.” After the user tests the app, they will complete a survey to provide feedback on the difficulty level of each task. With these results, *Gated*'s user interface could be improved. After incorporating the feedback, I would talk to software engineers in order to gain a partner to help me finish the project. I also need investors to help fund the cost of production. *Gated* could be a year away from being published on the App Store.

The app audit and informal feedback from friends and faculty suggests *Gated* offers a unique value proposition and meets a need for students at UConn. Although *Gated* was built specifically for UConn and comes with preloaded UConn data, the model can be tailored to other universities. Ideal clients would be universities with large student populations (8,000+ students) that do not offer students access to course review data.

Imagine if...

Gated was available on the App Store and the Google Play store.

When it was time to register for courses, students could search for credible professor reviews, examine course syllabi, and have a good understanding of the content covered. They could glean information about the professor's teaching style from student comments and gain confidence in their course selection. Once in classes, students

easily make group chats for each of their classes with ease and create learning communities. Students would be able to establish a peer network at their fingertips to ask about essential decisions regarding majors and minors. They could learn more about clubs and sports and find other students in their dorms or particular interest areas. Students would be able to build a community and a support system of real people that they could rely on.

Closing Remarks

With over 20 screens, building *Gated* was an intense and ambitious project. I learned to investigate a problem thoroughly with an open mind before trying to solve it. I had to empathize and walk in my peers' shoes to understand their academic challenges. Putting aside my own biases and examining a problem with objectivity and empathy was a great learning experience. During this project, I had to wear several hats: social scientist, designer, and coder. I was challenged and stretched to the limit of my abilities in every area.

Throughout this past year, I immersed myself in solving this problem by thinking holistically about students' concerns. I applied the disciplines of statistical research and design thinking to solve those problems. The collaboration with my thesis supervisor (Brian Daley) and statistics professor (Kathleen McLaughlin) was enjoyable and thought-provoking. They were very generous with their time and ideas. When beginning my academic journey at UConn, my goal was to be able to work in the technology space and create products that would improve people's lives. I feel that *Gated* aligns with this goal and would undoubtedly improve students' lives. I would love to have continued to the next phase of this project, but therein lies the opportunity for my future endeavors. Based on my research, I believe that if launched, *Gated* could unlock students' college experience for the better.

Works Cited

- “Academic Catalog: COMM 1000.” *University of Connecticut Academic Catalog*, UConn, catalog.uconn.edu/undergraduate/courses/comm/. Accessed 8 May 2024.
- Costello, Vic, et al. “Chapter 6: User Interface Design.” *Multimedia Foundations: Core Concepts for Digital Design*. Focal Press, 2012, pp. 167–201.
- Costello, Vic, et al. “Chapter 8: Text.” *Multimedia Foundations: Core Concepts for Digital Design*. Focal Press, 2012, pp. 235–263.
- “Fact Sheet 2023”, University of Connecticut, universitycommunications.uconn.edu/content/uploads/sites/15/2022/12/INS_010_UConn-Fact-Sheet-v3_FY2023.pdf. Accessed 9 May 2024.
- Freed, Heather. “Six Reasons to Mentor a Child.” *Big Brothers Big Sisters of Southwestern Illinois - Youth Mentoring*, bbbsil, 25 Feb. 2022, www.bbbsil.org/six-reasons-to-mentor-a-child/?gad_source=1&gclid=Cj0KCQjw_-GxBhC1ARIsADGgDjtD98PC1gu2dl16rPkTgviRDUsj7lO-w95y3ukCVMhG9_6Ek-1u-BAaAqnREALw_wcB.
- “Field Notes: Mentoring to Build Students’ Sense of Belonging.” *American Association of Collegiate Registrars and Admissions Officers*, AACRAO, www.aacrao.org/resources/newsletters-blogs/aacrao-connect/article/3-mentoring-strategies-for-building-students-sense-of-belonging?gad_source=1&gclid=Cj0KCQjw_-GxBhC1ARIsADGgDjtRbcNkrUnvGIUTz21JuOj0F7THC3cXEuvnFT8LDTVnNx9YHkFI_GoaAoDoEALw_wcB. Accessed 9 May 2024.
- Foran, Sheila. “UConn’s Great Lawn Remains Central to Campus Identity.” *UConn Today*, 27 Sept. 2012, today.uconn.edu/2012https://today.uconn.edu/2012/09/uconns-great-lawn-remains-central-to-campus-identity//09/uconns-great-lawn-remains-central-to-campus-identity/.
- Glusac, Elaine. “The Gates at Harvard Have Stories to Tell.” *The New York Times*, The New York Times, 19 Aug. 2016, www.nytimes.com/2016/08/21/travel/blair-kamin-architecture-harvard-yard.html.
- Harvard Gazette. “The History of Harvard Gates.” *Harvard Gazette*, 23 May 2016, news.harvard.edu/gazette/story/2016/05/the-history-of-harvard-gates/.
- “Harvard Locks Down Quad during Protest.” *Boston Herald*, Boston Herald, 18 Nov. 2018, www.bostonherald.com/2011/11/12/harvard-locks-down-quad-during-protest/.

Heaney, Katie. "I Forgot How to Hang Out." *The Cut*, The Cut, 3 Mar. 2021, www.thecut.com/article/covid-isolation-changed-social-lives-fix.html.

"Introducing ZeeMee Community." *YouTube*, 15 Apr. 2019, www.youtube.com/watch?v=SrhTiZ4Dz5w.

Jaworski, Matt, "The Benefits and Drawbacks of Closed Online Communities." *PeepSo*, 14 Apr. 2022, www.peepso.com/the-benefits-and-drawbacks-of-closed-online-communities/.

Kishore, Guncha. "Open Community or Closed Community. What Should It Be?" *Grazitti Interactive*, www.grazitti.com/blog/open-community-or-closed-community-what-should-it-be/#:~:text=The%20main%20advantage%20of%20an,GIFs%2C%20memes%2C%20and%20more. Accessed 9 May 2024.

Le Queinec, Oliver. "Princeton University Main Gate by Olivier Le Queinec." *Pixels*, 17 Dec. 2013, pixels.com/featured/princeton-university-main-gate-olivier-le-queinec.html.

Mask, Rick. "What Is Social Capital and Why Is It so Important?" *Southern New Hampshire University*, 19 Nov. 2019, www.snhu.edu/about-us/newsroom/business/what-is-social-capital.

"OMS Reviews." *OMSCentral*, Georgia Tech Computer Science Department, www.omscentral.com/. Accessed 9 May 2024.

"Ratemyprofessors.Com – Case Study." *Professional Leadership Institute*, 27 Feb. 2023, professionalleadershipinstitute.com/case-studies/ratemyprofessors-com-case-study/#:~:text=History%20of%20Rate%20My%20Professors,changed%20the%20name%20in%202001.

"Reflections on Mirror Lake." *UConn Today*, 14 Oct. 2016, today.uconn.edu/2016/10/reflections-mirror-lake/.

Roberto. "Broken Window of an Abandoned Building Covered in Blue Ivy Plant." *iStock*, 28 May 2019, www.istockphoto.com/photo/broken-window-of-an-abandoned-building-covered-in-blue-ivy-plant-gm1151554037-312125539.

Ryabokon, Ivan. "Sensor Gate Icon Vector Flat." *Vecteezy*, www.vecteezy.com/vector-art/21781687-sensor-gate-icon-vector-flat. Accessed 7 Aug. 2024.

Silberling, Amanda. "College Social App Fizz Is Growing Fast - Maybe Too Fast." *TechCrunch*, 29 Nov. 2022, techcrunch.com/2022/11/23/fizz-college-social-app-series-a/?guccounter=1.

Solomons, Dionne, et al. "Chapter 6: User Experience Design." *eMarketing: The Essential Guide to Marketing in a Digital World*, Red & Yellow Publishing, 2023, pp. 135–158.

"Success Criterion 1.4.6 Contrast." W3C, Web Content Accessibility Guidelines (WCAG) 2.1, www.w3.org/TR/WCAG21/#contrast-enhanced. Accessed 9 May 2024.

Sun, Kim-Ling. "What Does It Mean to Be Undeclared?: BestColleges." *BestColleges.Com*, 23 Aug. 2022, www.bestcolleges.com/blog/what-does-undeclared-mean/#:~:text=An%20estimated%20%2D50%25%20of,to%20apply%20to%20college%20undeclared%3F.

Terrar, David, and Jon Reed. "What Is Design Thinking?" *Agile Elephant Making Sense of Digital Transformation*, 20 Feb. 2018, www.theagileelephant.com/what-is-design-thinking/.

"The Psychology of Being 'liked' on Social Media." *Medium*, The Startup, 27 Jan. 2018, medium.com/swlh/likes-on-social-media-87bfff679602#:~:text=That%20little%20rush%20you%20get,through%20a%20shot%20of%20dopamine.

Thompson, Dennis. "Loneliness Is Plaguing Americans in 2024: Poll." *Health Day*, 1 Feb. 2024, www.usnews.com/news/health-news/articles/2024-02-01/loneliness-is-plaguing-americans-in-2024-poll.

"UConn Home Page." *UConn*, uconncontact.uconn.edu/organizations. Accessed 8 May 2024.

"UConn Student Evaluation of Teaching Survey Questions." *Budget, Planning, and Institutional Research*, UConn, bpir.uconn.edu/wp-content/uploads/sites/3452/2022/08/Common-Data-2020.pdf. Accessed 9 May 2024.

V., Sofia. "Font Readability Research: Key Difference between Serif vs sans Serif Font." *Geniusee*, geniusee, 30 June 2021, geniusee.com/single-blog/font-readability-research-famous-designers-vs-scientists.

View Q & Interpret Results, Harvard University, q.fas.harvard.edu/view-q-interpret-results. Accessed 9 May 2024.

"ZeeMee: The Best Social Media App for College Students? A Zeemee Breakdown." *Medium*, 9 Aug. 2022, medium.com/@zeemee/zeemee-the-best-social-media-app-for-college-students-a-zeemee-breakdown-61f2dd7dcd39.

Appendix 1: HuskyLink Website Review

HuskyLink is a new website that was released in 2023. Its purpose is to prepare UConn students for the job market and future careers. The onboarding process asks users their major, their career goals, and what motivates them (building things, being creative, helping people, etc.) . Users can also upload a professional headshot. Then, once students are logged in, they can “match” with other UConn alums who had the same major or are working in a field of interest to the students. Searching by hometown or working location is another way to narrow down the people search. Once students have found someone, they can direct message that person to start the career conversation. There are also group chats for different industries and advanced degree programs. If an alumni wants to share their knowledge with current UConn students in a more public way, they can post on the “Share Your Career Stories” page. There is no mobile version of *HuskyLink* available at this time. (After the submission of this thesis, *HuskyLink* announced that it is being discontinued on August 16th, 2024.)

The screenshot displays the HuskyLink onboarding interface. On the left, a light blue sidebar contains the HuskyLink logo and the heading 'Recognize Your Strengths'. Below this, a 'PRO TIP' box advises users not to overthink their choices. The main content area is titled 'What motivates you?' and includes instructions to select up to 3 motivators. A grid of nine buttons with icons and labels allows users to select their motivators: 'Achieving goals' (target icon), 'Being challenged' (mountain icon), 'Being creative' (pencil and eraser icon), 'Building things' (wrench and screwdriver icon), 'Helping others' (hands icon), 'Learning new things' (lightbulb icon), and three partially visible buttons at the bottom: 'Staying organized' (clipboard icon), 'Working with others' (puzzle piece icon), and 'Earning money' (dollar sign icon). The 'Being creative' button is highlighted with a blue border. At the bottom, 'Back' and 'Next' buttons are visible. The footer indicates the site is 'Powered by PeopleGrove'.

Figure A1.1: *HuskyLink* onboarding to see what motivates students.

HUSKYLINK

Make Confident Career Decisions

Sign out

Where are you in your career today?

Select the one that best matches your current status. You can update this at any time.

- ☐ Find the best career path for me
- ☐ Upskill and gain exposure
- ☐ Prepare and apply for jobs
- ☐ Give back by sharing my experience

Back Finish

Figure A1.2: HuskyLink onboarding to identify stage of student's career search

People who majored in Digital Media and Design [View all](#)

1 thing in common

Abigail Colburn

Nutritional Science, 2022

Postdoctoral Research Associate at The John B. Pierce Laborator...

My key motivators

Working independently +2

Message

2 things in common

Anne Oeldorf-Hirsch

Mass Communicati..., 2011

Associate Professor at University of Connecticut

I can help with

Volunteering and com... +5

Message

2 things in common

Kyra Lee

Maternal/Child Health an...

Registered Nurse at Northwell Health

My key motivators

Achieving goals +2

Message

2 things in common

Madison Cox

Speech-Language P..., 2022

Development and Engagement Intern at Our Piece of the Pie

I can help with

Choosing a career path +4

Message

Figure A1.3: HuskyLink results page identifies UConn Alumni who “majored in Digital Media and Design”

Appendix 2: Survey I Questions

College Student App Usage Survey I

This survey is for a senior thesis about developing a new App for college students. Responses will only be used to aggregate data and individual names will not appear. If you wish to learn more about this research, feel free to contact jillian.milton@uconn.edu. Thank you for participating.

This survey should take about 7 minutes to complete.

n = 22

jillian.milton@uconn.edu [Switch account](#)



Not shared

* Indicates required question

1. What is your UConn email? (This survey is only open to UConn students.) *

Your answer

2, What is your class year? *

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Graduate Student



3. Do you live on or off campus? *

- ☐ On campus dorm
- ☐ On campus suite/ apartment
- ☐ Off campus house/ apartment
- ☐ Commuter

4. What is your gender? *

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Non-binary/ non-conforming
- ☐ Prefer not to respond
- ☐ Other: _____

5. Regarding academic needs, rank the following from 1-5 (1 is the most important).

	1 (Most Important)	2	3	4	5 (Least Important)
Find students in my major or currently enrolled in the same course	☐	☐	☐	☐	☐
Find students who have taken a course I might take in the future	☐	☐	☐	☐	☐
Receive student opinions about professor(s) whose course(s) I am considering taking	☐	☐	☐	☐	☐
Find a tutor	☐	☐	☐	☐	☐
Find internship/ research/ study abroad opportunities	☐	☐	☐	☐	☐



6. Are there any other academic needs that you would like the app to address?

Your answer _____

7. Select the top 3 apps that you currently use to meet your academic * needs.

- ☐ Discord
- ☐ Facebook
- ☐ Instagram
- ☐ Reddit
- ☐ Rate My Professor
- ☐ Snapchat
- ☐ Slack
- ☐ Twitter aka X

8. Socially, which one of the following best describes you? *

- ☐ I would like to expand my social circle.
- ☐ I am comfortable with the amount of friends in my social circle.
- ☐ I feel that I am stretched too thin with my social commitments.
- ☐ Other: _____



9. Regarding social needs, rank the following from 1-5 (1 is the most important).

	1 (Most Important)	2	3	4	5 (Least Important)
Meet and find friends	☐	☐	☐	☐	☐
Find dining companions	☐	☐	☐	☐	☐
Make connections in a Fraternity/ Sorority	☐	☐	☐	☐	☐
Find people who are in a club I am considering	☐	☐	☐	☐	☐
Finding roommates	☐	☐	☐	☐	☐

10. Are there any other social needs, not including dating, that you would like the app to address?

Your answer _____

11. Select the top 3 apps that you currently use to meet your social needs (not including dating).

*

- ☐ Discord
- ☐ Facebook
- ☐ Instagram
- ☐ Reddit
- ☐ Snapchat
- ☐ Slack
- ☐ Twitter aka X
- ☐ UConntact
- ☐ ZeeMee

12. Regarding informational needs, rank the following from 1-5 (1 is the most important).

	1 (Most Important)	2	3	4	5 (Least Important)
Events happening around campus	☐	☐	☐	☐	☐
Meeting students who live in a dorm/ residence hall I am considering or currently live in	☐	☐	☐	☐	☐
Find a ride home	☐	☐	☐	☐	☐
Find a ride to an athletic event	☐	☐	☐	☐	☐
Dining Hall and downtown Storrs dining recommendations	☐	☐	☐	☐	☐

13. Are there any other informational needs that you would like the app to address?

Your answer _____

14. Select the top 3 apps that you currently use to meet your informational needs. *

- ☐ Discord
- ☐ Facebook
- ☐ Instagram
- ☐ Reddit
- ☐ Snapchat
- ☐ Slack
- ☐ Twitter aka X
- ☐ UConnctact
- ☐ Dining Paws
- ☐ My UConn
- ☐ Other: _____

15. Please rank in order of importance (1 is the most important). I am most interested in having an app that addresses...

	1 (Most important)	2	3 (Least important)
Informational needs such as events on campus, dining recommendations, finding rides, etc.	☐	☐	☐
Social needs such as meeting friends, finding roommates, clubs, etc.	☐	☐	☐
Academic needs such as learning about professors, courses, internships, etc.	☐	☐	☐

16. Which statement best describes your weekends?

- ☐ I am always looking for something to do.
- ☐ I have something to do with one or two friends.
- ☐ I have a lot of activities with my friends.
- ☐ I visit friends and family at home on the weekends.
- ☐ Other: _____



17. Are you a transfer student?

☐ Yes

☐ No

18. Are you an international student?

☐ Yes

☐ No

19. Would you be willing to test a prototype of the app that will be developed as a result of this survey? If yes, type in your UConn email.

Your answer _____

20. How can this survey be improved?

Your answer _____

Submit

Clear form

Appendix 3: Survey I Results

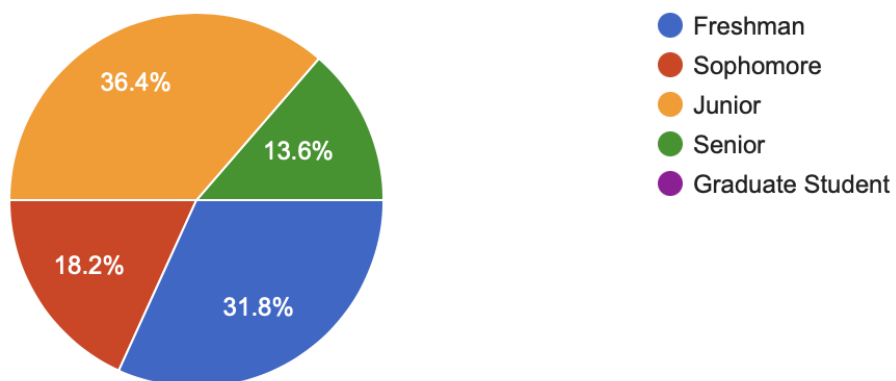
College App Usage Survey – Version I

Summary of Results

Dates in field: 9/18/23 - 9/22/23

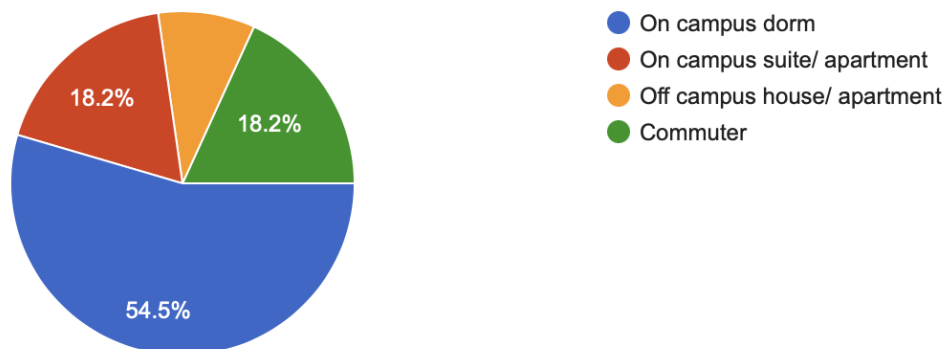
2, What is your class year?

22 responses



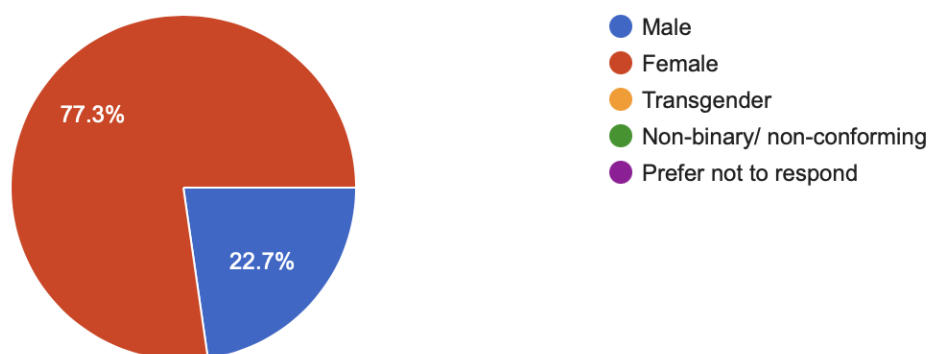
3. Do you live on or off campus?

22 responses

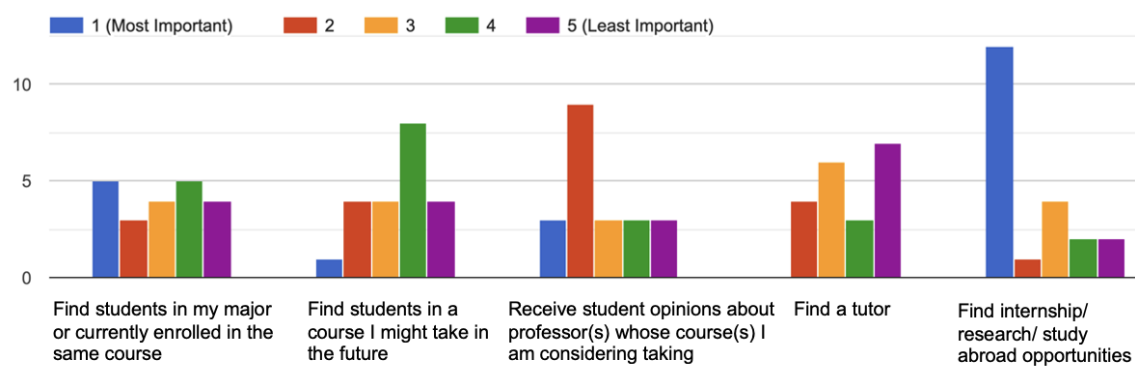


4. What is your gender?

22 responses

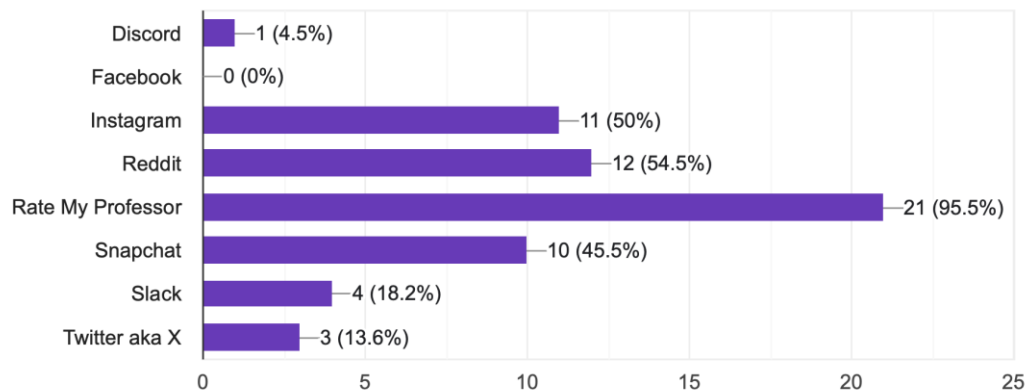


5. Regarding academic needs, rank the following from 1-5 (1 is the most important).



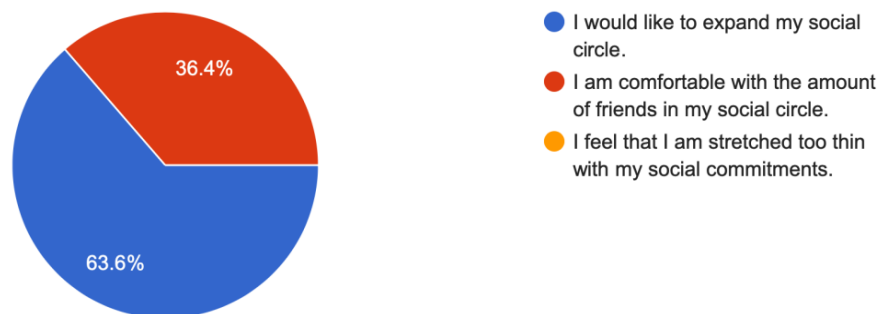
7. Select the top 3 apps that you currently use to meet your academic needs.

22 responses

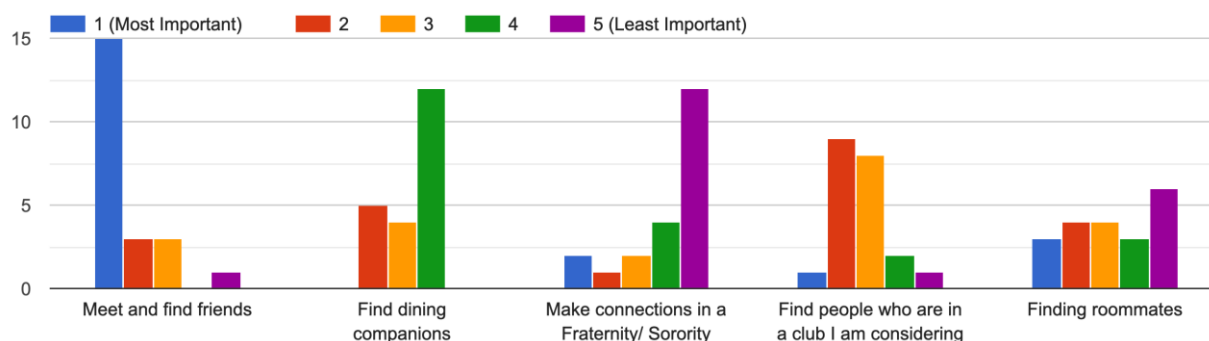


8. Socially, which one of the following best describes you?

22 responses

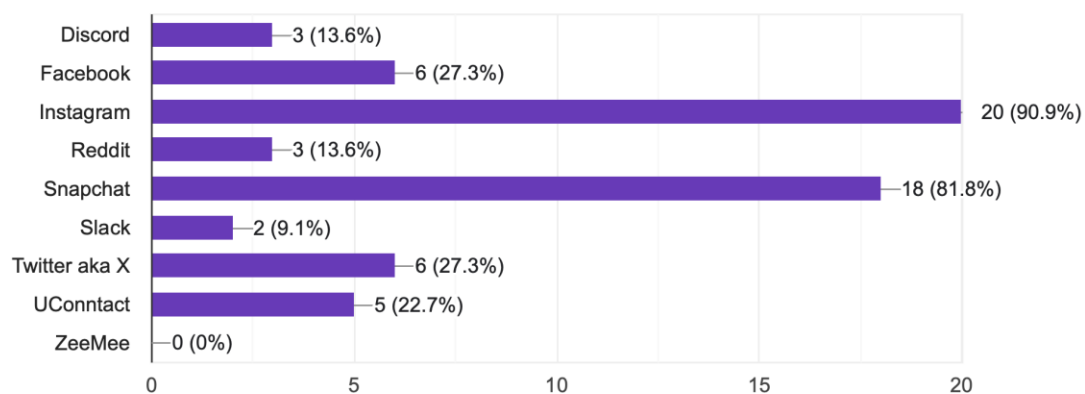


9. Regarding social needs, rank the following from 1-5 (1 is the most important).

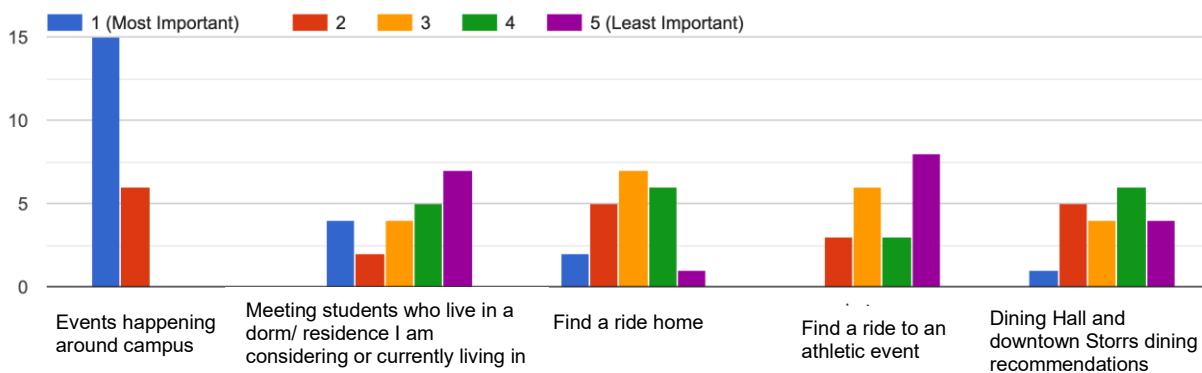


11. Select the top 3 apps that you currently use to meet your social needs (not including dating).

22 responses

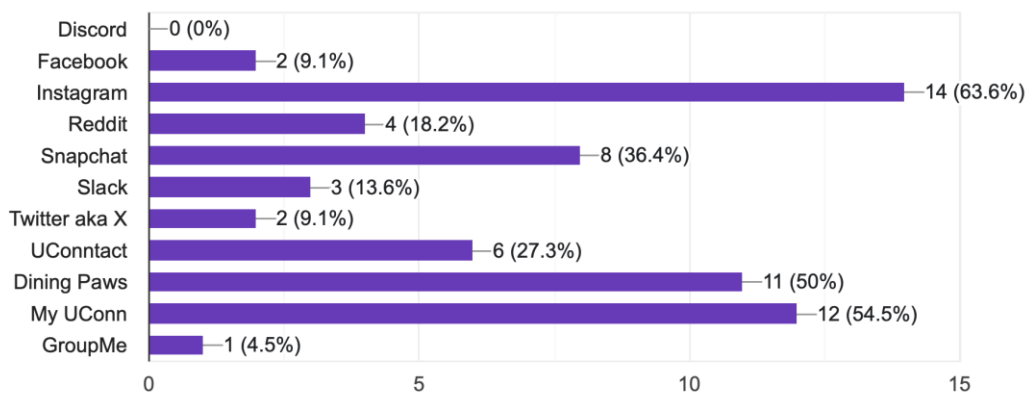


12. Regarding informational needs, rank the following from 1-5 (1 is the most important).

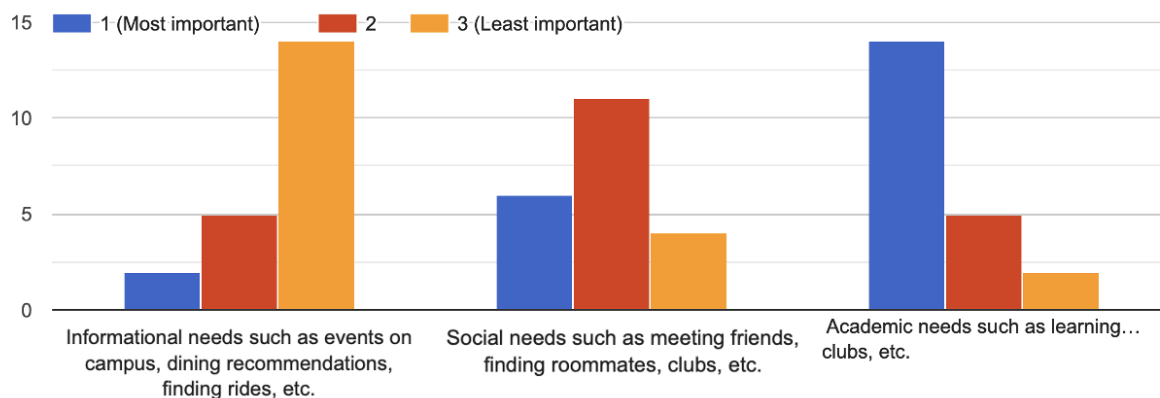


14. Select the top 3 apps that you currently use to meet your informational needs.

22 responses

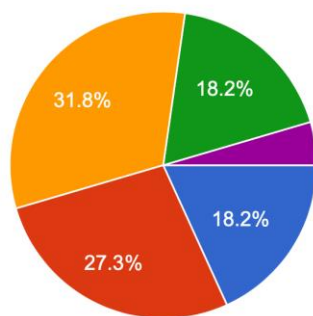


15. Please rank in order of importance (1 is the most important). I am most interested in having an app that addresses...



16. Which statement best describes your weekends?

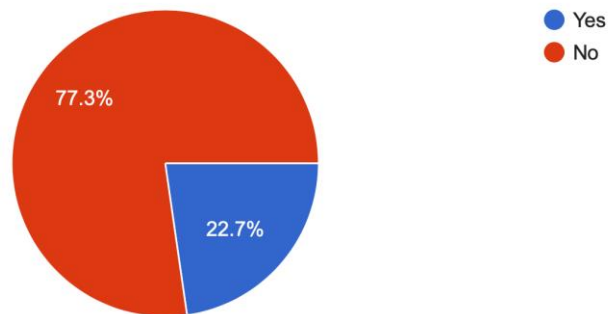
22 responses



- I am always looking for something to do.
- I have something to do with one or two friends.
- I have a lot of activities with my friends.
- I visit friends and family at home on the weekends.
- I'm working mostly at pizza restaurant.

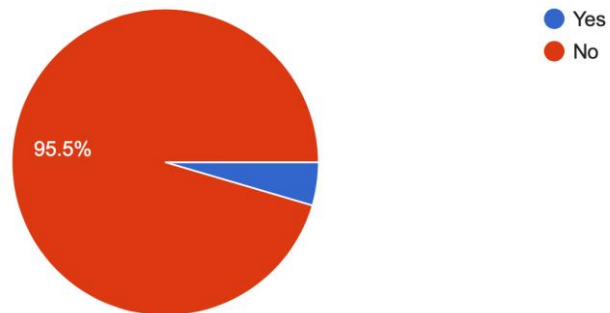
17. Are you a transfer student?

22 responses



18. Are you an international student?

22 responses



Appendix 4: Survey II Questions

College Student App Usage Survey II

This survey is for a senior thesis about developing a new App for college students. Responses will only be used to aggregate data and individual names will not appear. Thank you for participating.

n = 301

This survey should take about 7 minutes to complete.

jillian.milton@uconn.edu [Switch account](#)



Not shared

* Indicates required question

1. What is your UConn email? (This survey is only open to UConn students.) *

Your answer

2. What is your class year? *

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ Graduate Student



3. Do you live on or off campus? *

- ☐ On campus dorm
- ☐ On campus suite/ apartment
- ☐ Off campus house/ apartment
- ☐ Commuter

4. What is your gender? *

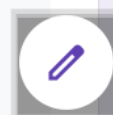
- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Non-binary/ non-conforming
- ☐ Prefer not to respond
- ☐ Other: _____

5. Regarding current academic needs, rank the following from 1-3 (1 is the most important).

	1 (Most Important)	2	3 (Least Important)
Find students in major/ minor for camaraderie	☐	☐	☐
Find students in the same course for group chats or study partners.	☐	☐	☐
Find a tutor	☐	☐	☐

6. Regarding future academic needs, rank the following from 1-5 (1 is the most important).

	1 (Most Important)	2	3	4	5 (Least Important)
Find students in major/minor for guidance	☐	☐	☐	☐	☐
Receive student opinions about a course, professor, workload, etc.	☐	☐	☐	☐	☐
Connect with study-abroad students.	☐	☐	☐	☐	☐
Connect with students who have done research in a specific field.	☐	☐	☐	☐	☐
Connect with students who had an internship in a specific field.	☐	☐	☐	☐	☐



field.

7. Are there any other academic needs that you would like the app to address?

Your answer

8. Select the top 3 apps that you currently use to meet your academic needs.

	1 (Favorite)	2	3 (Least Favorite)
Rate My Professor	☐	☐	☐
Reddit	☐	☐	☐
Instagram	☐	☐	☐
Snapchat	☐	☐	☐
Slack and Discord	☐	☐	☐
X, formerly Twitter	☐	☐	☐

9. Thinking of your top App for meeting academic needs (from your answer to question 8), how satisfied are you? (1 is most satisfied, 5 is least satisfied).

	1 (Most Satisfied)	2	3	4	5 (Least Satisfied)
Satisfaction	☐	☐	☐	☐	☐

10. If you are not completely satisfied with the App you selected from question 9 in terms of meeting your academic needs, why? Select all that apply.

- ☐ Information is outdated
- ☐ Platform is open to the public and not private
- ☐ Not enough UConn students on the platform
- ☐ Biased reviews
- ☐ Too time-consuming
- ☐ Other: _____

11. Socially, which one of the following best describes you? *

- ☐ I would like to expand my social circle.
- ☐ I am comfortable with the amount of friends in my social circle.
- ☐ I feel that I am stretched too thin with my social commitments.
- ☐ Other: _____

12. Regarding social needs, rank the following from 1-5 (1 is the most important).

	1 (Most Important)	2	3	4	5 (Least Important)
Meet and find friends	☐	☐	☐	☐	☐
Connect with students living near me	☐	☐	☐	☐	☐
Make connections in a club or athletic team	☐	☐	☐	☐	☐
Find roommates	☐	☐	☐	☐	☐
Make connections in a Fraternity/ Sorority	☐	☐	☐	☐	☐



13. Are there any other social needs, not including dating, that you would like the app to address?

Your answer _____

14. Select the top 3 apps that you currently use to meet your social needs (not including dating).

	1 (Favorite)	2	3 (Least Favorite)
Instagram	☐	☐	☐
Snapchat	☐	☐	☐
X, formerly Twitter	☐	☐	☐
Facebook	☐	☐	☐
UContact	☐	☐	☐
Slack and Discord	☐	☐	☐

15. Thinking of your top App for meeting social needs (from your answer to question 14), how satisfied are you? (1 is most satisfied, 5 is least satisfied).

	1 (Most Satisfied)	2	3	4	5 (Least Satisfied)
Satisfaction	☐	☐	☐	☐	☐

16. If you are not completely satisfied with the App you selected from question 15 in terms of meeting your social needs, why? Select all that apply.

- ☐ Platform is too public
- ☐ Not enough UConn students on the platform
- ☐ Hard to get to know people on the platform
- ☐ Too time-consuming
- ☐ Other: _____

17. I am more interested in having an app that addresses _____
(check one) *

- ☐ Social needs such as meeting friends, finding roommates, connecting with students in clubs, athletic teams, and living spaces, etc.
- ☐ Academic needs such as finding students in my major or students who have experiences with certain professors, internships, study abroad, etc.



18. Are you a transfer student?

☐ Yes

☐ No

19. Which statement best describes you? *

☐ I resided in Connecticut before coming to UConn.

☐ I resided in another state before coming to UConn.

☐ I am an international student.

20. Would you be willing to test a prototype of the app that will be developed as a result of this survey? If yes, type in your UConn email.

Your answer

21. Which race or ethnicity best describes you? Choose one.

- ☐ American Indian/ Alaskan Native
- ☐ Asian/ Pacific Islander
- ☐ Black or African American
- ☐ Hispanic
- ☐ White/ Caucasian
- ☐ Multiple Ethnicity

22. Do you identify with any of the following groups?

- ☐ First-generation college student
- ☐ LGBTQ
- ☐ Student with a disability
- ☐ Yes, but prefer not to say
- ☐ No

23. How did you hear about this survey? (Provide course number and Instructor's name).

Your answer _____

Submit

Clear



Appendix 5: Survey II Results

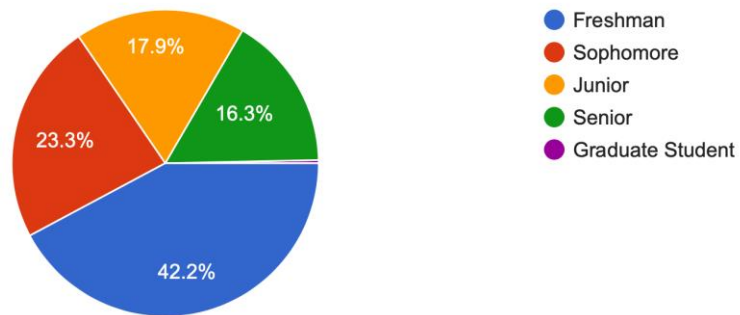
College Student App Usage Survey – Version II

Summary of Results

Dates in field: 10/01/23 - 10/21/23

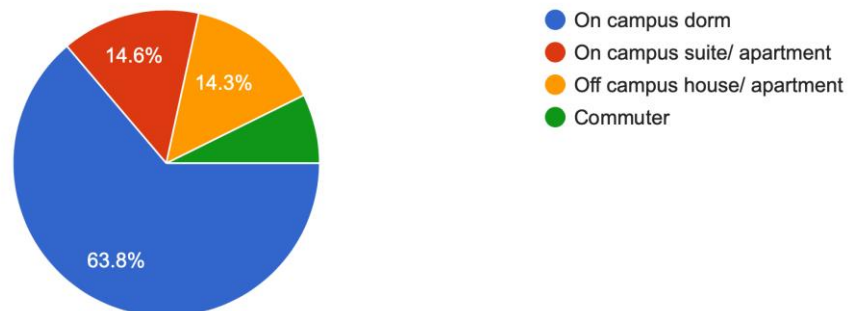
2. What is your class year?

301 responses



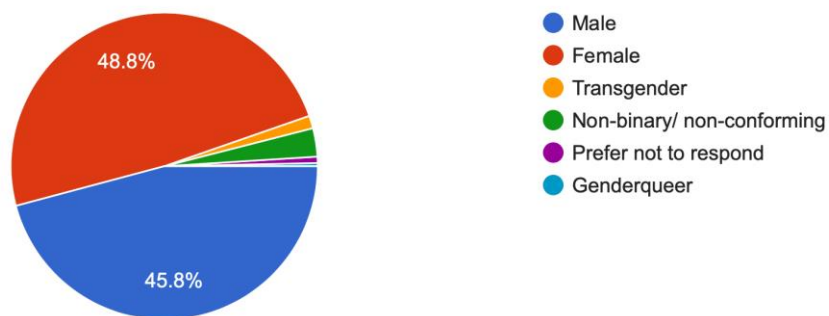
3. Do you live on or off campus?

301 responses

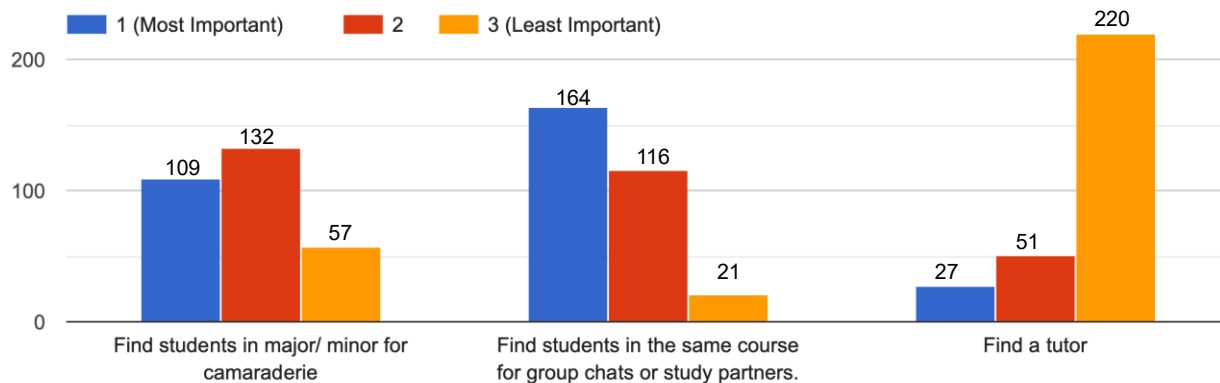


4. What is your gender?

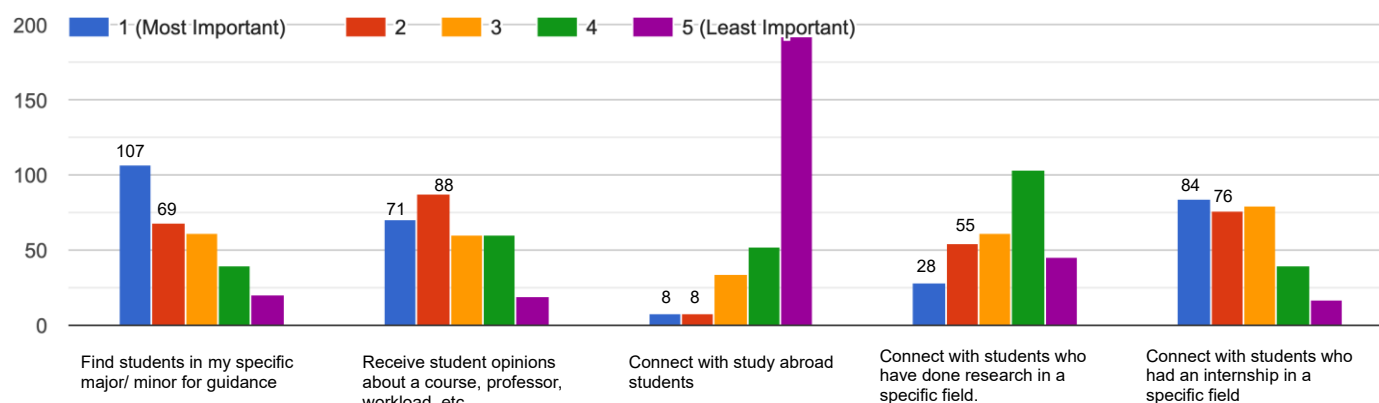
301 responses



5. Regarding current academic needs, rank the following from 1-3 (1 is the most important).



6. Regarding future academic needs, rank the following from 1-5 (1 is the most important).



7. Are there any other academic needs that you would like the app to address?
(152 responses)

Advising (9)

1. Advising
2. What are the best classes you should take to fulfill gen eds.
3. Help finding the right major for you.
4. Course scheduling/courses to take within that major.
5. Suggestions for classes to take based on major/minor and requirements.
6. Allow students to review the course.
7. Perhaps things specific to thesis, honors, and other requirements.
 - a) Advice for students in honors (honors thesis, credits, general advice)
8. Applications for grad school/further education such as pharmacy, med, law school.
9. Networking with recent alumni in your major.

Study Groups (8)

1. Requirements and making study groups.
2. Study tips and be able to schedule study sessions w others.
3. Forming study groups.
4. Ways to communicate with people in same class.
5. Help to make group chats for classes.

6. Studying Advice
7. Help on how to study for specific exams or classes maybe
8. Help on Homework

Study Materials (8)

1. Connecting students to appropriate study resources for courses.
2. Practice exams for big courses
3. Old notes may be useful
4. Built in websites that can help with certain subjects
5. Online study resources for each course that are not through the school (quizlet study guides, etc.)
6. Sometimes with my ECON classes I don't even know how to practice what we're covering.
7. Include which courses actual need the "required" textbook and what other materials you will need.
8. Secondhand book sales maybe?

Internships/ Jobs/ Career (8)

1. How to get internships as a freshman.
2. How to gain clinical experience as a pre-med student.
3. Internship help.
4. Talks about next steps as to finding internships regarding major.
5. Available job opportunities, depending on someone's major.
6. Be able to connect with recruiters.
7. Advice about grad and post-grad experiences (such as finding a job after college).
8. General career path guidance (such as finding a career path).

Mentoring (6)

1. I like the idea of connecting people with others for guidance and internship connections.
2. Find mentors, find internship opportunities, or other opportunities around campus.
3. Connect with students who did well in a course and find out what worked well for them.
4. Connecting with graduate students in our area of study.
5. Connecting with alumni to help guide course recommendations to different fields.
6. Contact with alumni.

Meet Students in major/ department/ country (5)

1. Connect by schools and not just majors
2. Networking in your academic field.
3. Finding people in the same major in your lecture classes
4. Connect with those who have taken winter/summer courses.
5. Looking for some student from same country.

Professor Support (4)

1. Whether the professor offers extra time outside of lecture, such as special study sessions.
2. How to get help when all the usually offered help is unavailable due to class conflicts.
3. Talk to professors directly.
4. Networking with professors.

Time Management Support (4)

1. Agenda
2. Time management
3. Schedule/planner reminders
4. Time management

Disability/ Mental Health Related (4)

1. Accessibility.
2. Studying/academic support and advice for neurodivergent students.
3. Managing academics and mental health.
4. Mini posts about people talking about their academics and stress.

Tutoring (2)

1. Bio 1107 tutoring
2. Tutoring]

Grades (2)

1. Average grade
2. How to recover when you get a grade that's not good on an exam.

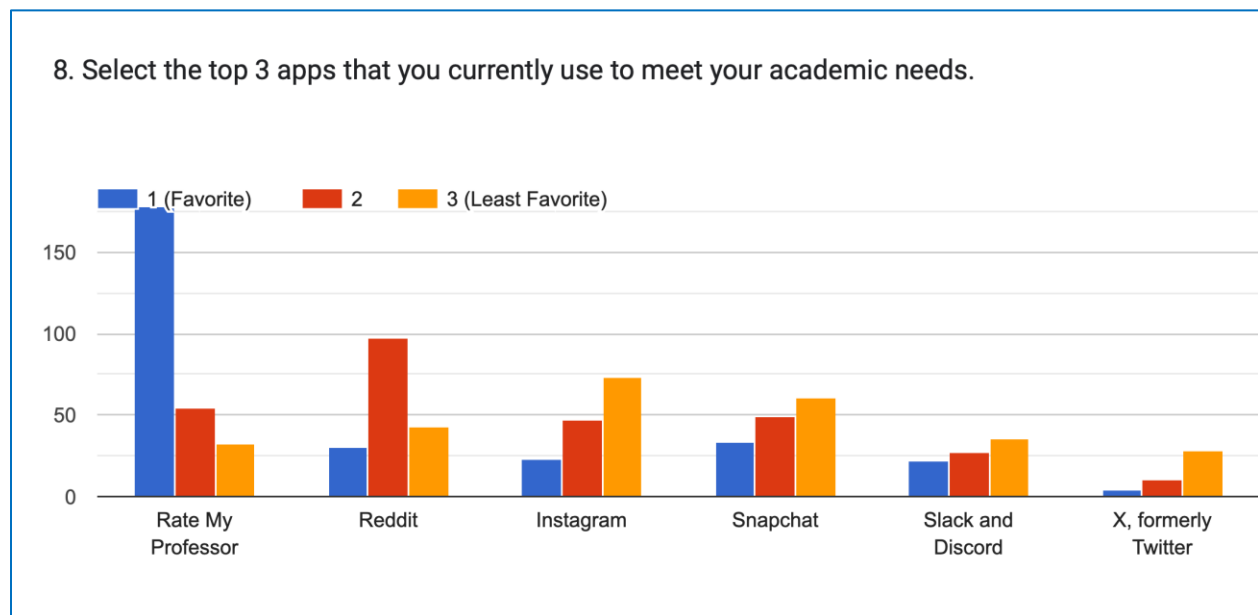
Misc (9)

1. Extracurricular and majors
2. Scholarship opportunities
3. Areas where false success is identified
4. More (l)imitations to entrepreneurship
5. Yes
6. Yes
7. /

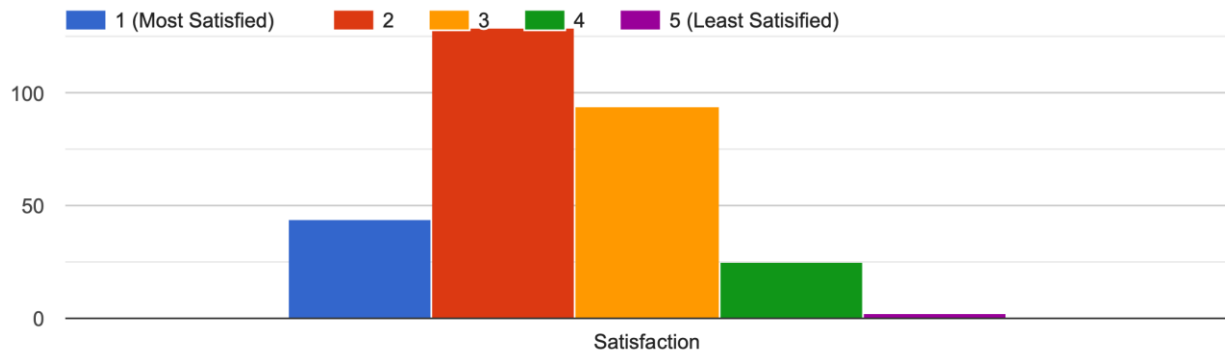
No (20)

1. No
2. No.
3. No.

4. No
5. None
6. Nope
7. Not that I can think of.
8. Not that I can think of at this time.
9. Not at the moment
10. None at the moment
11. No other academic needs.
12. That seems to cover it.
13. None.
14. Not at this current time and place.
15. Nothing
16. This covers all of my academic needs.
17. That seems to cover it.
18. NA
19. NA
20. N/A

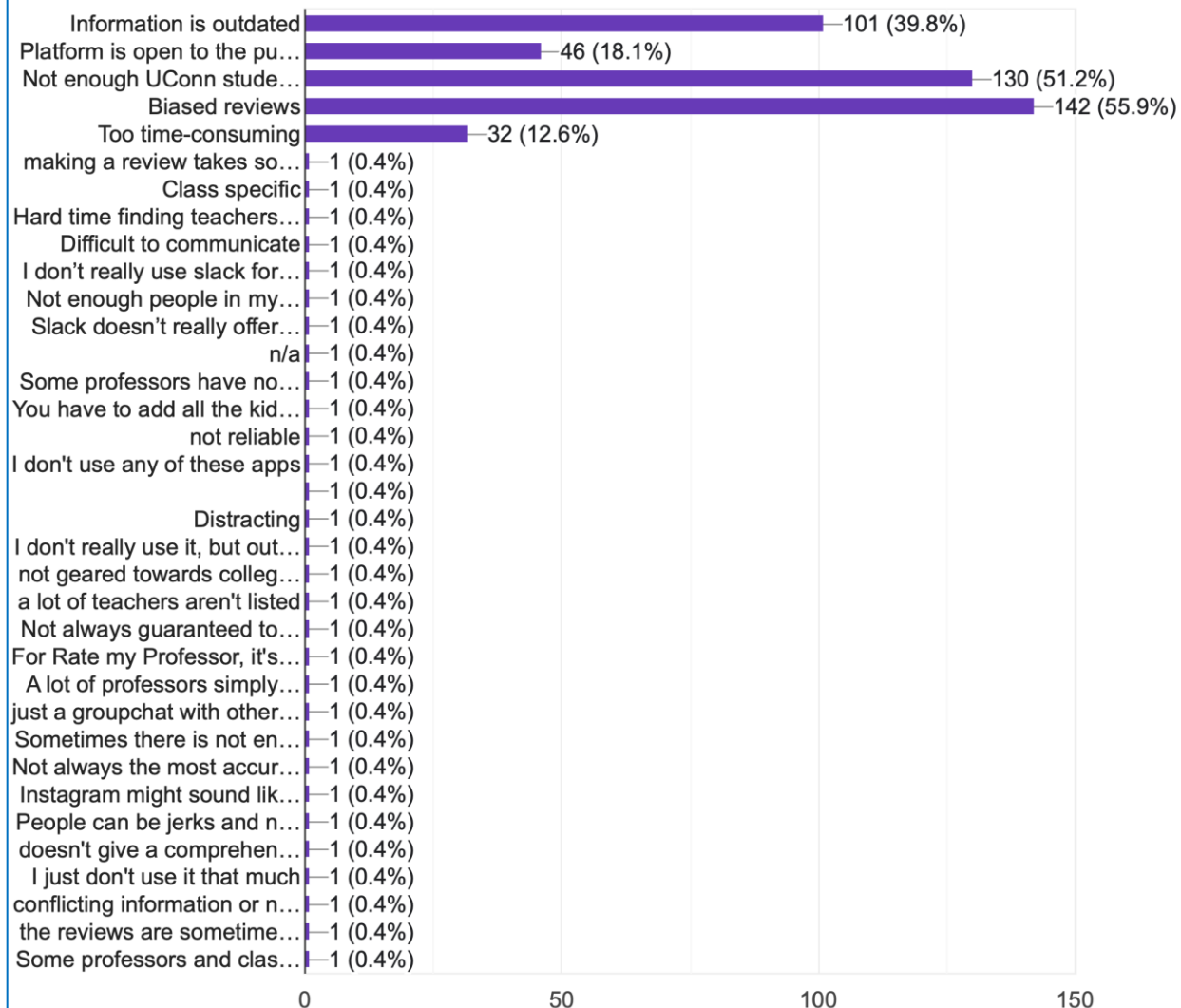


9. Thinking of your top App for meeting academic needs (from your answer to question 8), how satisfied are you? (1 is most satisfied, 5 is least satisfied).



10. If you are not completely satisfied with the App you selected from question 9 in terms of meeting your academic needs, why? Select all that apply.

254 responses



Question #10 Verbatims

***Rate My Professor* comments**

1. For *Rate my Professor*, it's hard to tell if the Professor is actually bad or if the student is just not good
2. A lot of professors simply don't have ratings on *Rate my Professor*
3. Some professors have no reviews or its for only certain classes they have
4. Conflicting information on some professors.
5. The reviews are sometimes mixed.
6. Some professors and classes do not have reviews.
7. People can be jerks and not a variety of answers of quality.
8. Sometimes there is not enough participation on the site so the information can be inaccurate or outdated
9. Making a review takes some time
10. Class specific
11. Hard time finding teachers/ professors
12. I don't really use it, but out of the rest it's the most used
13. A lot of teachers aren't listed

***Slack* comments**

1. I don't really use slack for educational purposes
2. Slack doesn't really offer me a chance to get information about certain things

***Instagram* comments**

1. Instagram might sound like a weird app but there are a lot of videos that talk about mental toughness

Group Chats

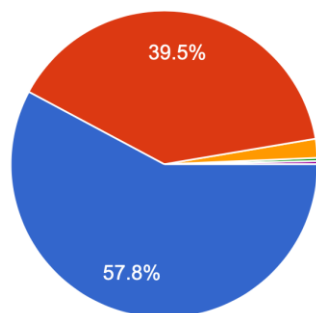
1. Just a group chat with other students
2. You have to add all the kids in your class

Miscellaneous

1. Not reliable
2. Not enough people in my major use it
3. I don't use any of these apps
4. Distracting
5. Not always guaranteed to get the help I am seeking
6. Not always the most accurate
7. Doesn't give comprehensive report.
8. I just don't use it that much.
9. Not geared towards college, it's a platform that is broad but can be used for college-related
10. Difficult to communicate
11. n/a

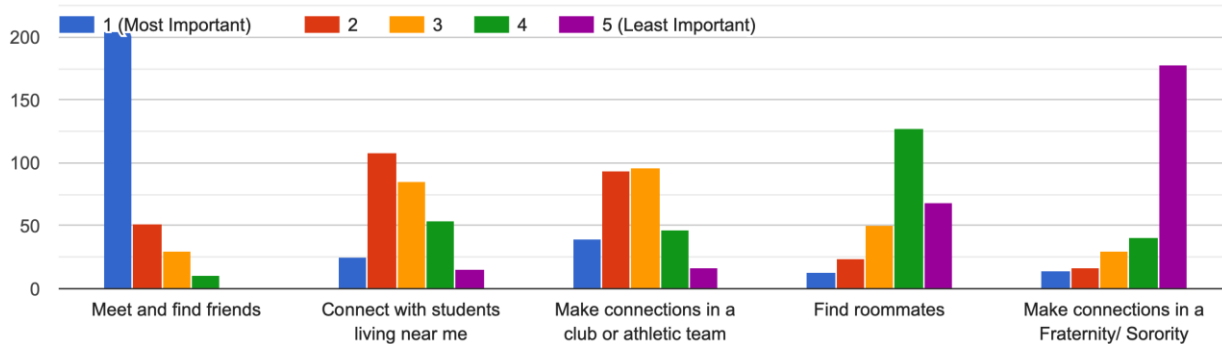
11. Socially, which one of the following best describes you?

301 responses



- I would like to expand my social circle.
- I am comfortable with the amount of friends in my social circle.
- I feel that I am stretched too thin with my social commitments.
- I both feel like I need to expand my social circle and make actual...
- i wish i could connect with my in person friends more with simple...

12. Regarding social needs, rank the following from 1-5 (1 is the most important).



13. Are there any other social needs, not including dating, that you would like the app to address? (136 Responses)

Meeting Friends (14)

1. Maybe interest-based communication/friends?
2. How to approach trying to connect with others.
3. None, just making more friends easier, where people are welcoming.
4. Making friends with each other.
5. Friendship with people of similar likings.
6. Social Battery
7. Just meeting people who have similar interests as me.
8. Find people with specific interests.
9. How to connect with friends based on certain interests
10. Finding friends are important, but most importantly be able to find people with the same interests so that people can talk to each other.
11. Profiles that connect you with people who have similar interests.
12. A way to meet people that you share similar interests to, helping start a friendship with a more baselined opinion.
13. Being able to meet new people.
14. Finding friends within specific communities and cultural groups. LGBT+ community for me specifically, but it can be a whole bunch of different groups for many people.

Social Events (5)

1. Events going on.
2. Social events
3. Finding out something to do when bored to make new connections with people.
4. Group meeting in student union.
5. Hangouts.

Professional Support/ Mental Health / Relationship Support (5)

1. Someone to talk to for life advice, career/overall mental health. That aren't just friends but professionals.
2. Mental health support, peer-driven support groups.
3. How to set boundaries/and how to bring up problems with your roommate.
4. Anonymous advice.
5. How to be in very social spaces.

Study Groups/ Study Materials (5)

1. Possibly the need for study groups and creating a bulletin of times and rooms for study sessions.
2. A way to connect people who are in big lectures together.
3. Able to meet up at potential study spots or just to talk with professors/students through the app.
4. Study needs
5. Quizlet

Meet Students in Major (3)

1. Finding friends in your major or specific subsection of it to not only study with but also just unload stuff about course complaints and interests in your major.
2. Finding friends within your major or related majors.
3. Connect with same major.

Networking for Opportunities (3)

1. Finding connections for potential internships/jobs.
2. Find people working jobs on campus to connect with.
3. Yes social networking with older and influential people. Finding mentors.

Club Information (3)

1. Similar to all the different clubs who post their social events, but just in 1 place or account.
2. Information about clubs on campus. The UConn website for clubs is outdated and hard to navigate.
3. Clubs

Dating (2)

1. I'm not sure how I would feel about using an app for both academic and romantic purposes. However, I think a UConn specific dating app might be better suited for student needs than apps such as tinder
2. Major-preference based dating

Special Interests (4)

1. Address healthy ways to consume media (i.e. not comparing yourself to others, don't post nudity, etc.)
2. Connecting with people who live near your hometown that go to UConn
3. Talk with same major students online from other schools.
4. Connecting with older students with families to other students in similar positions. (Married with kids).

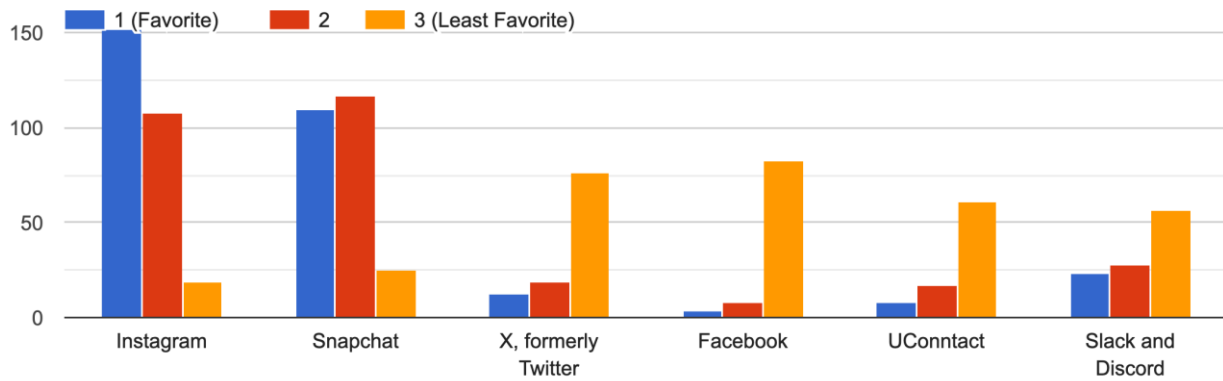
Misc (3)

1. yes
2. Academic
3. Any

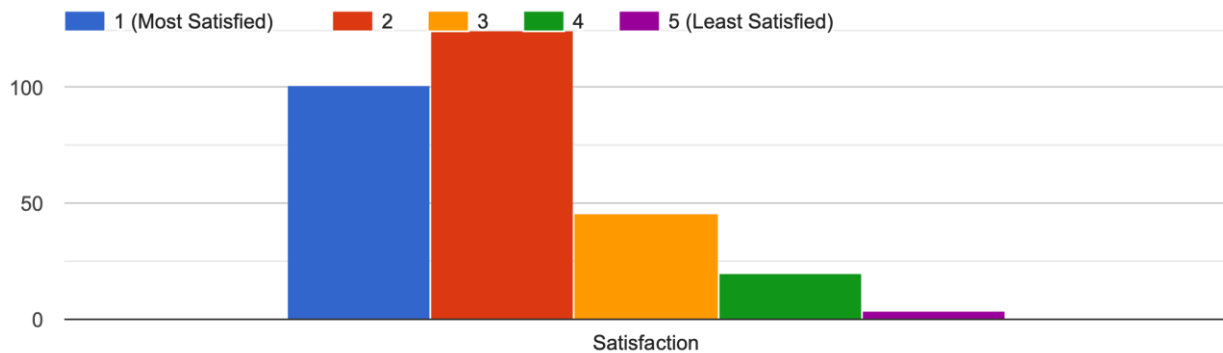
No (23)

1. No
2. No
3. No
4. No
5. No
6. No
7. No.
8. Nope
9. Nope
10. None
11. None
12. No, I don't use social media
13. Not at this time.dfs
14. None come to mind at the moment
15. Not really
16. I believe question 12 covers it well.
17. No other needs.
18. Not at the moment
19. NA
20. N/A
21. N/A
22. NA
23. NA

14. Select the top 3 apps that you currently use to meet your social needs (not including dating).

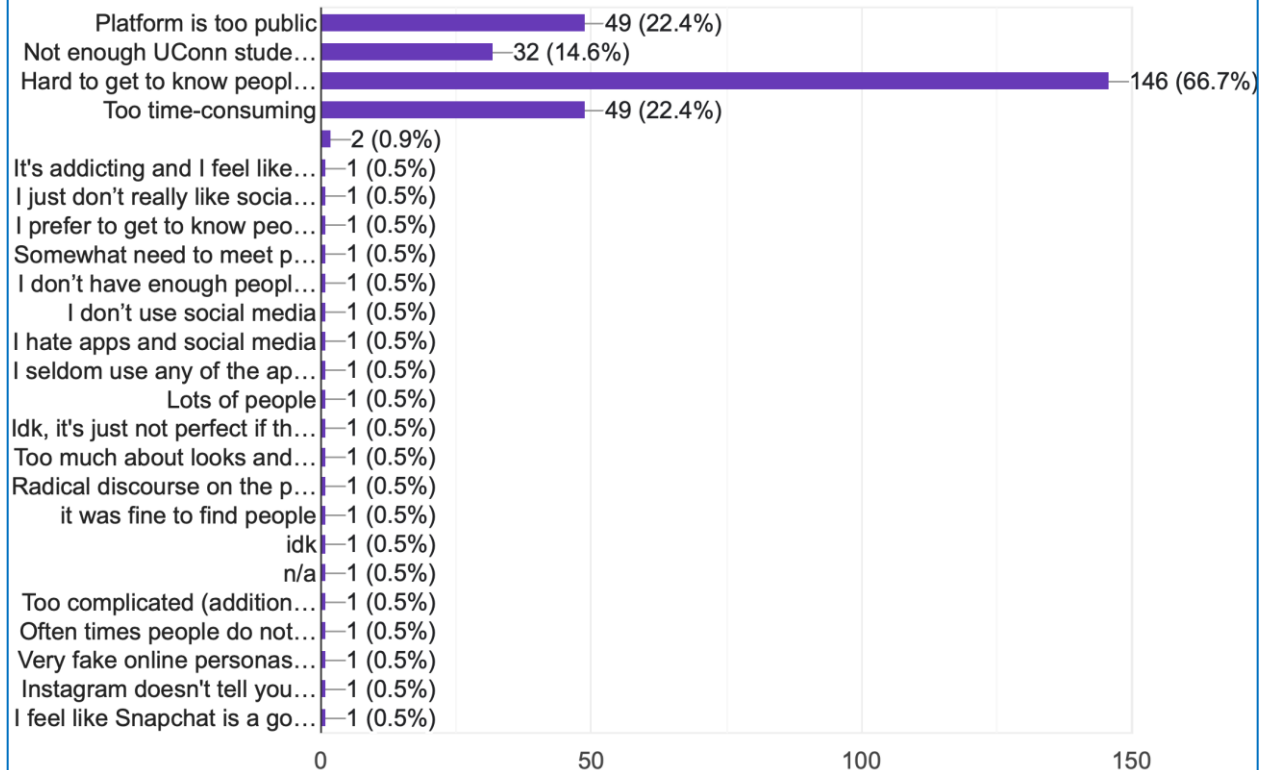


15. Thinking of your top App for meeting social needs (from your answer to question 14), how satisfied are you? (1 is most satisfied, 5 is least satisfied).



16. If you are not completely satisfied with the App you selected from question 15 in terms of meeting your social needs, why? Select all that apply.

219 responses



Question #16

Write-In Verbatims (20)

Do not like/use social media

1. I don't use social media.
2. I prefer to get to know people in person rather than virtually.
3. Somewhat need to meet people in person first.
4. I hate apps and social media.
5. I don't have enough people added.

Do not like people's behavior on Social Media

1. Too much about looks and "social status"
2. Very fake online personas sometimes.

3. Radical discourse on the platform.
4. Often times people do not respond to their posts for any information on meetups, events, or dates.

Use different Apps

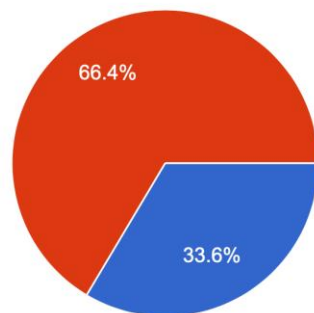
1. I seldom use any of the apps listed above.
2. I just don't really like social media, and actually, I mostly use Tumblr.

Various drawbacks trying to make connections with people

1. Lots of people
2. Idk, It's just not perfect if that makes sense.
3. Too complicated (addition of Snapchat+, all of the ad content, etc.)
4. Instagram doesn't tell you how far people are from you.
5. I feel like Snapchat is a good way to connect with/ get to know my existing friends, but feel like for me it's not...
6. It was fine to find people.
7. It's addictive and I feel like I can't delete it because I would miss important communications.
8. Idk
9. n/a

17. I am more interested in having an app that addresses _____ (check one)

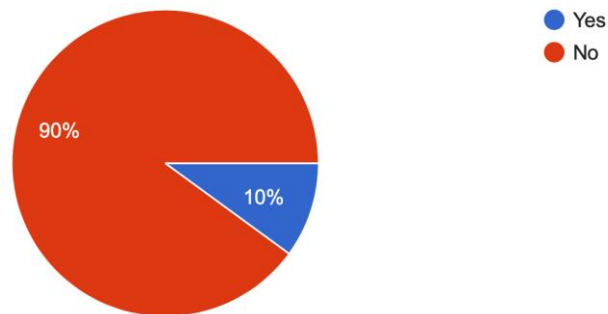
301 responses



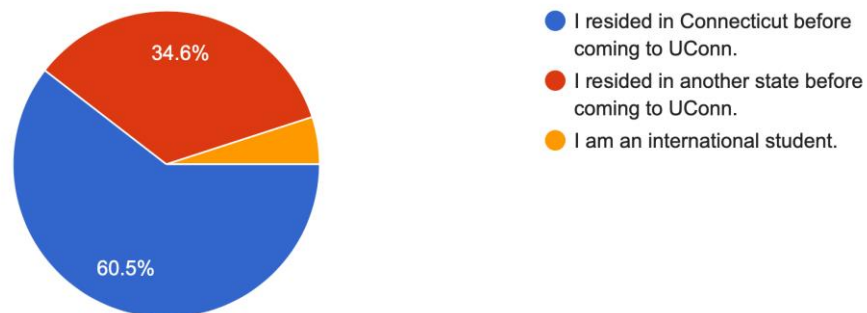
- Social needs such as meeting friends, finding roommates, connecting with students in clubs, athletic teams, and living spaces, etc.
- Academic needs such as finding students in my major or students who have experiences with certain professors, internships, study abroad, etc.

18. Are you a transfer student?

299 responses

**19. Which statement best describes you?**

301 responses



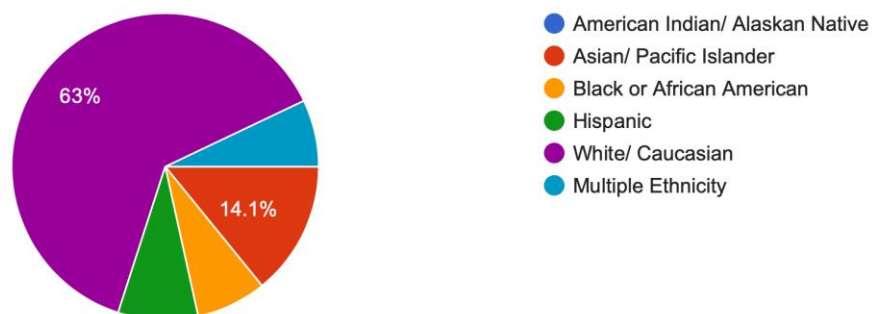
Would you be willing to test a prototype of the app that will be developed as a result of this survey? If yes, type in your UConn email.

20. Would you be willing to test a prototype of the app that will be developed as a result of this survey? If yes, type in your UConn email. (183 responses)

- Yes
- No

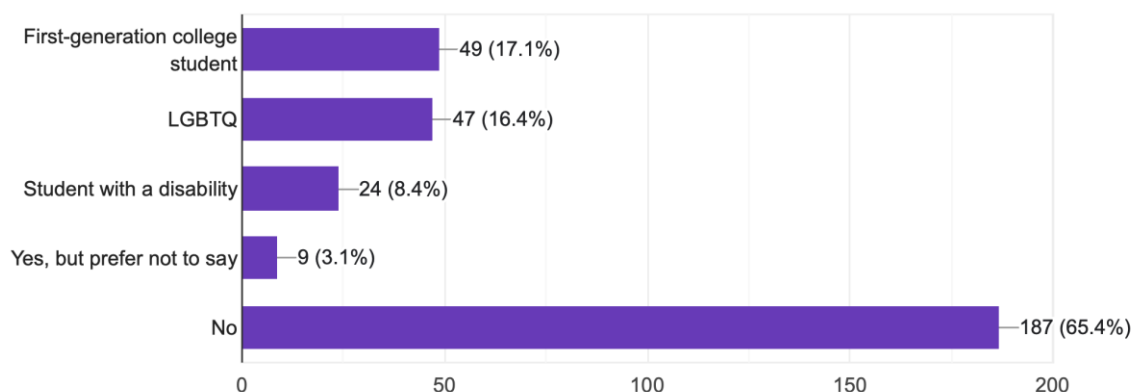
21. Which race or ethnicity best describes you? Choose one.

297 responses



22. Do you identify with any of the following groups?

286 responses



23. How did you hear about this survey? (Provide course number and Instructor's name). (261 responses)