

DUBSTUDY



DubStudy

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Study Rooms | Final Prototype

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Problem Brief

Study rooms are an essential part of almost every student's life. Being able to find a space where you are comfortable enough to study and not have to deal with distractions is important. The objective is to help those students find the study room or space they need to succeed.

Team Logistics & Policies

Meetings:

The group meetings are on Monday from 1:00 pm to 2:00 pm and on Thursday from 3:00 pm to 4:00 pm.

Communications:

The group will communicate using iMessage and commit to replying to any team member's message or update within 8 hours. In addition to this, the team will always post a notification regarding any progress the group makes on the assignment document.

Another format of communication will be through Zoom meetings to share the screen and ideas easier.

File Storage

The group will use a Google Team Drive to store all of the files for easy access, viewing and collaboration.

Problem Statement

Introduction

At UW, many students struggle to find available study spaces on campus. With a large student population of over 60,000, popular study locations such as the Suzzallo Library and dormitory study lounges are often overcrowded. However, UW has a number of lesser-known study rooms scattered across campus, providing ample space and quiet environments for students to study individually or in groups. To help students take advantage of these spaces, the plan is to implement an information system that will make it easy for students to locate and access these study rooms. This will help alleviate the problem of overcrowded study spaces and provide students with more options for finding a quiet, comfortable place to study.

Research

Some students at the University of Washington do have problems finding quiet or empty study rooms. After interviewing a few students, it has been noted that a system that will help students find available study rooms would be greatly appreciated. The importance of the study room is highly valued among students interviewed. Recent studies have shown that students in crowded settings can develop depression, anxiety, and unhealthy coping habits such as binge eating and overuse of the internet. In the article, *The race for space: How today's crowded study environments could affect college students' performance*, Ana Garcia, a human development student at UC Davis, notes that study time in libraries helped her depression, but when she went home, she "just wanted to do nothing" (p. 24). Being in a library got her into a studying mindset. Besides this, some of the students also complain that they get distracted by their roommates. Though there are study lounges on every floor, they usually do not have enough space for all of the students. In other cases, commuter students often do not have the time to go home and would rather do assignments on campus. Even if they are studying at home, another random distraction could occur. This is shown in the article *Lane: Studying in public more efficiently, less distracting*, Logan Lane discusses the importance of studying in a public place where other students are studying in order to motivate oneself to do the same. Lane also stated that "when we're at home we tend to dress comfortably, sometimes going so far as just wearing pajamas, and this could lead

to disastrous results” (p. 6). It’s good that we are able to have a comfortable place to study like our home but when a person feels so relaxed, they tend to get distracted and this leads to them not getting their work done. In research, it was discovered that the University of Washington also has its own study room system called Scout. However, their system is not that big or in-depth. It does not include a lot of study rooms on campus, just the ones associated with libraries. It allows students to make reservations in advance, however, it only allows one hour for a single booking. It does not show traffic in the study rooms but you can filter by noise levels. The system is also not that well known among students interviewed.

Conclusion

After researching the importance of study rooms and their effects on mental health, it has been decided that it is important that a solution is implemented where students can find study rooms that suit their needs. Student interviews provided a lot of insight into students’ opinions on how they feel about study rooms. They’re the credible source that will be helpful for us to do research in order to find the causes of the problem. This problem mostly targets the UW Student demographic. In research, it was discovered that Scout is UW's current study room system. However, Scout does not list as many study rooms and also does not list the availability or traffic of said study rooms. Going forward inspiration will be gathered from that system and also gathering more research regarding specific study rooms. It would be beneficial to explore study rooms across campus in order to document them for students. This would give students the opportunity to get a feel for the rooms and determine if they meet their needs.

User Research

Surveys

- Survey Link:
<https://docs.google.com/forms/d/1dDkRImbtne8izowNKfB9ScMcXF6DUrIXEn0W93Rx6E4/edit>

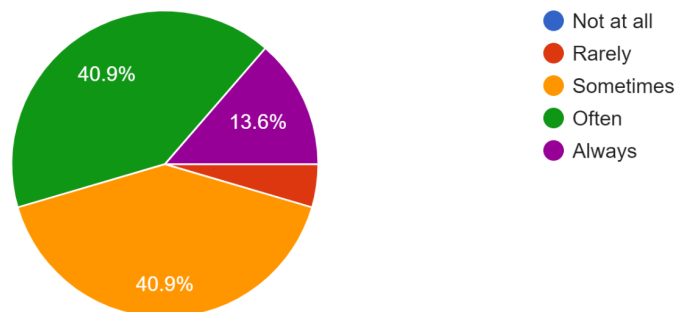
The purpose of the survey is to gather information about the process of everyone at UW finding their study spaces on campus. This research method was appropriate because it provides people with questions that relate to their daily life and mostly asks them for their opinion about their experience in finding rooms or places to study on campus. Some distribution methods that were used are posts through social media including Instagram and Reddit, messages like SMS, and in person with a QR Code. Almost every college student nowadays has social media and it's a most helpful way to spread the survey to a school's page where many students who are target consumers of the survey are active. SMS is another way to help get people into answering the survey but it isn't as effective as social media and in-person because most people don't care for information spreading through SMS compared to when they're on social networking platforms. In-person is another best way to get most of your stakeholders to take the survey at specific locations. Some demographics collected are their gender, grade level at UW, and their majors or intended majors. This is because there are many libraries and buildings on the campus representing different subjects so just to check the information of why and how people get to these study areas during their free time. Some of the key questions asked are the familiar range of the respondents or target audience with the study spots around the campus. And even some open-ended questions asking about their process of finding study spots at UW to let them freely talk about something they do or like and don't like about their experience.

There are a total of 22 respondents in the survey which covers a wide range of students. There were 54.5% freshmen, 22.7% sophomores, 13.6% juniors, and 9.1% graduate students. Most of the students were pursuing a STEM-related field, with engineering being the most common. In the survey, 59.1% used

She/her pronouns, 36.4% used He/him pronouns, and 4.5% used She/they pronouns. From what the survey has shown, a large majority use the study rooms frequently. According to the results, 13.6% always use study rooms, 40.9% often use study rooms, and 40.9% sometimes use study rooms, with only 4.5% citing rarely. Due to the results of the survey, the focus should be shifted to libraries and study lounges that are found in residential halls. 81.8% of our survey respondents use the library or a residential hall study lounge. Most students do not reserve study rooms with only 22.7% having ever reserved one on campus. Many students also do not use any platforms to find study rooms, 86.4% of respondents in fact. Of the respondents who do, 9.1% use LibCal and 4.5% use Scout. In the question where it asks about experiences with finding a study room, most students responded that finding a study room was a negative experience, with responses like, “hit or miss”, “usually pretty busy”, or “not that great”.

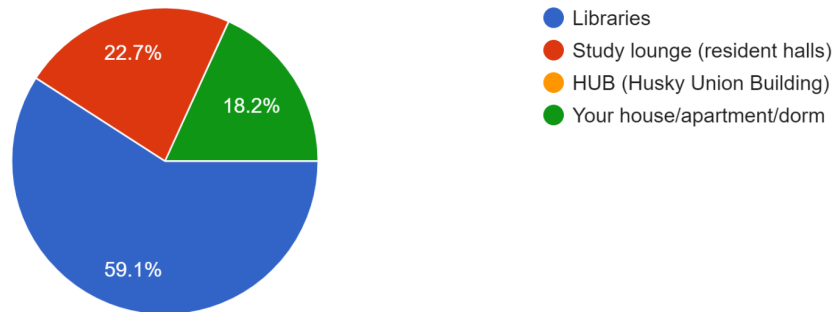
How often do you try to find a quiet space on campus to study or work on something?

22 responses



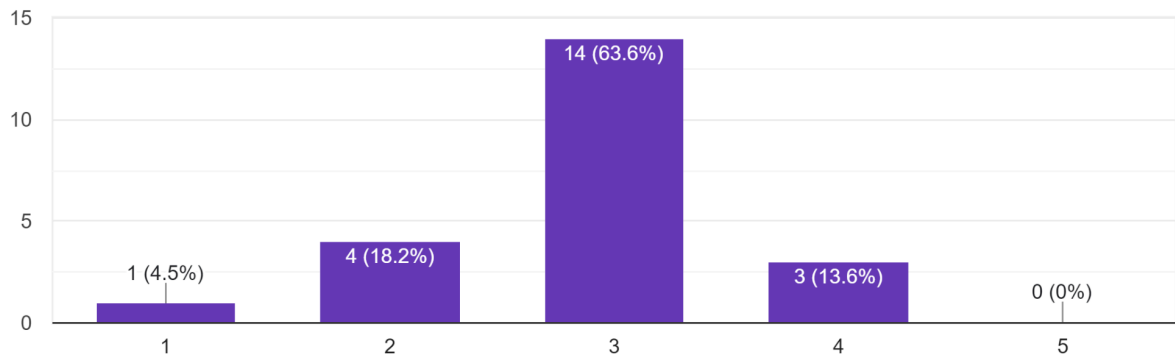
Where do you often study or do your homework?

22 responses



How would you rate the experience of trying to find a study room on campus? [1 = very dissatisfied, 5 = very satisfied]

22 responses



Interviews

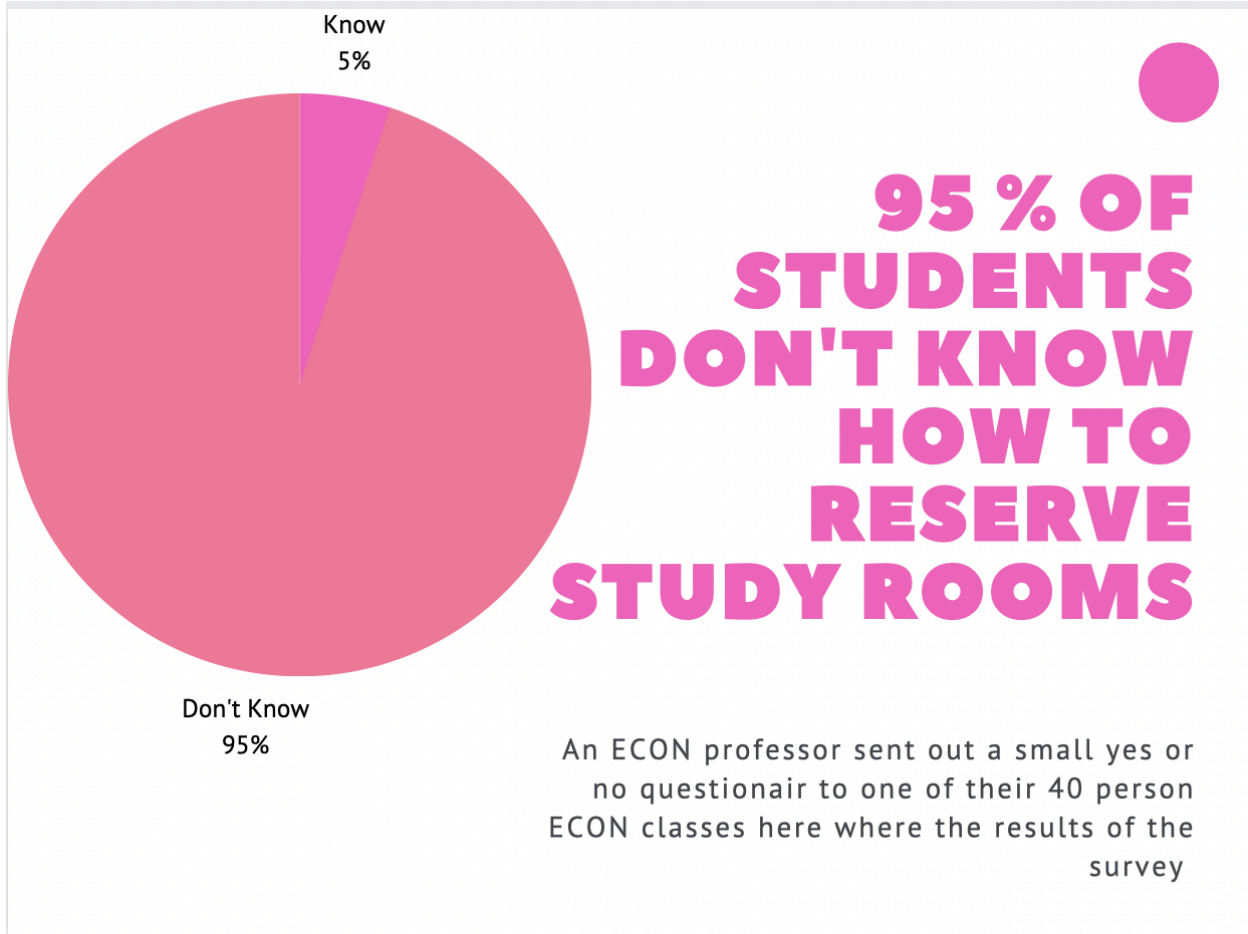
Stakeholder Interview (indirect - teacher)

Paragraph 1:

The interview was with an anonymous UW Economics professor. The purpose of this interview was to get information about how an indirect stakeholder would feel about the effects of their undergraduate students having trouble finding study rooms. The research method that was used was a small anonymous simple interview with them through zoom, this method was appropriate because they will speak their true thoughts on the situation as they remain anonymous and the interview questions got valuable information from an indirect stakeholder. The Key Questions that were asked were “How often do you assign group projects that would require students to meet up outside of class?”, “Have any students complained about not being able to find study rooms to meet with their group?”, “Do students often complain about their group not having good communication?”. These were the key questions that were asked during the interview, these questions all relate to the topic and give details on if teachers think communication and finding study rooms are hard for undergraduate students.

Paragraph 2:

There were many key insights and things that were learned from this interview. Some of the insights that the interview brought out were that the teacher did say that communication is a big part of assignments that are given to undergraduate students. Work is most likely to be done in groups and the work is usually done outside of class, so students usually need to find study rooms to work together. The professor also said that sometimes students have complained and emailed about the lack of available study rooms and that when they tried recording presentations people would walk in. However the professor did point out to them that after that they could reserve study rooms using Scout or Uw LibCal, however, the professor was surprised that the students had not been educated in this field and realized the lack of awareness. Overall the professor brought a different perspective to the findings of the study room.



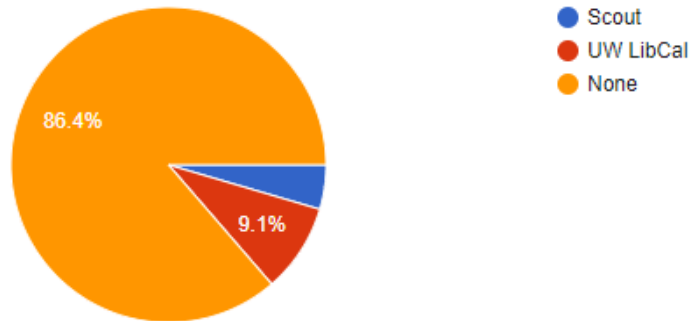
User Interview 1

The interview was with an interviewee named Ella Ott who is a graduate student at the University of Washington. She is also an instructor in some English classes during the autumn of 2022 and winter of 2023. The purpose of the interview was to find out more diverse opinions and concerns about the process of finding study spots on the campus and be able to discover some key points or problems' causes while creating user personas. This research method was appropriate because interviewing a person is always the most beneficial way to get the most detailed information that a researcher wants. Being able to interact closely with the interviewee in this situation would give a great opportunity to meet the topic's users, understand them better, and even start to design for them in the future. Some key questions that were asked are firstly about their familiar spots to study on campus, then move to deeper information by asking what resources they use or how they get to know about these places. Then the remaining questions are all about their feelings, thoughts, or opinions about their process of finding their study spots at UW.

Some key insights and learnings gained from this interview are basically the concerns, and desires of the interviewee about the topic. The interviewee states that it's easy to find study spots around the school but it's hard in a way because there always crowded like at the libraries or study lounges as some respondents in the survey also complained about this. Comparing the survey and the interview, there are some common problems such as the resources that they use to find the study rooms. The only resource that most respondents and Ella used to find out some quiet places to study are from other people. Even though there are other UW official resources such are Scout and LibCal but a large number of respondents and the interviewee in this interview don't know about them. As an instructor, Ella has one advantage that other students don't have is that she has her own office so she could have a quiet space most of the time to work on her stuff whenever she wants to. At the end of the interview, she also comments that it would be great if she was familiar with all the study spots at UW. After the interview, she also shared that when she was still an undergraduate student, she had a hard time studying at the libraries most of the time because they're always noise there which is a problem that other survey respondents also faced.

Do you use any platforms to find study rooms?

22 responses



(There is a big amount of respondents like the interviewee in this interview of the survey who never utilize resources like Scout and LibCal to find private study rooms).

How has your experience been with finding a study room on campus?

21 responses

- hard
- N/A
- Easy to find, but hard to actually get in and work because there's so many people.
- I don't use the private study room usually, so I think it's not difficult for me to find a study place
- I haven't booked one yet
- I can find a space most times!
- No pretty hard, just sometimes the space may be constrained
- Meh, it is usually easier to go to tutor areas
- Study rooms usually provide little benefit for studying over common spaces, and are often occupied, even when reserved.

User Interview 2

The interview was with an undergraduate student at UW (Janise Wu). The purpose of this interview was to figure out if and why finding a good study room is hard for an undergraduate student. The research method that was used was an interview with an undergraduate student. This was appropriate because the interview was with an undergraduate student who needs to use study rooms a lot due to her classes and major. Some of the key questions that were asked were the following. "Describe your experience trying to find good study rooms?", "How often do you need to find study rooms?", "What would you rate your experience with trying to find a study room on a scale of 1-5 (1 being hard, 5 being easy)?", "Have you ever tried to reserve a study room? If so, how and was it easy?", "Would you reserve study rooms more if there was a well-known easy way to do so?". These were the key questions that were asked during the interview, these questions all relate to the topic and give details on the problems with reserving study rooms and if it is hard or not to reserve the study room, and why it is hard to reserve them.

There were many key insights and things that were learned from this interview. The questions that were presented to the interviewees were designed to get at what the problems are with study rooms so if they have tried to overcome this problem, and how hard were the solutions to access. The insights that were gained were that in fact, the undergraduate student that was interviewed found that finding a study room was very hard for them, either because they were taken or that there were a lot of other people in them and they were talking loudly. This can be a problem because she needed to record herself and her team for a presentation and they couldn't due to circumstances. This caused them to waste a lot of time looking around for a study room. What was also uncovered when the questions were asked was that the undergraduate student didn't know you could reserve a study room through a couple of different UW platforms. They also said they would use a platform like that a lot if it was easy and accessible for study to reserve study rooms. Overall these key questions led to a lot of key information that can be used for a solution.

Study Room Problems!

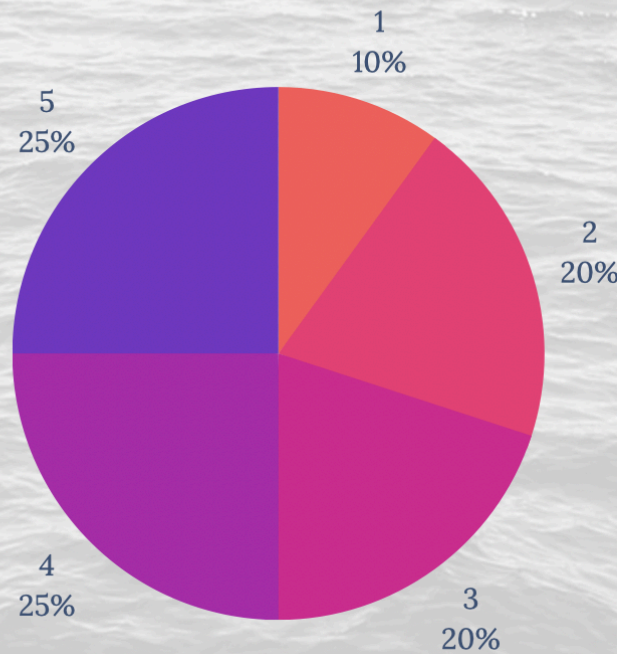
Undergraduate Student Janise Wu's experience with Study rooms and the four times she really needed to use them and had trouble finding empty rooms she could use

	TIME SPENT LOOKING FOR STUDY ROOM	TIME USED IN STUDY ROOM
BUISNESS PRACTICE PRESENTATION	~2 hours over 2 days	~15 min
GROUP WORK	~1 hour	~1 hour
RECORDED PRESENTATION	~1 hour 30 minutes	~30 min
GROUP WORK	~1 hour	~2 hours

This graph displays the uneven distribution of time spent looking for a study room compared to the amount of time actually using the study room!

DIFFICULTY FINDING STUDY ROOMS

Out of the last 10 times Janise went to the study room we asked to rate her experience finding a good room 1-5 (1 being easy 5 being difficult) Here is the data



reasons for higher rating include:

- *Private Study Rooms being occupied*
- *Public Study Rooms having to many people*
- *too far of a walk for the team*

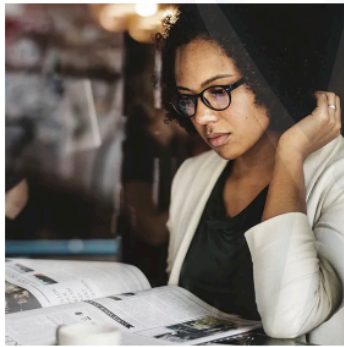
based on her personal judgement

This graph shows how many times in a cluster of data the experience of finding a study room was for the undergraduate student

User Personas

User Persona 1:

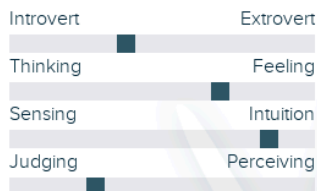
Chelsea Green



"My goal is to improve the student's engagement in class activities and projects with differentiated instruction through online and campus resources."

Age: **37**
Occupation: **Associate Professor**
Education: **Master's Degree**
Major: **Informatics**
Marital Status: **Married**
Location: **Seattle, WA**
Archetype: **The Ambitious Educator**

Personality



- Caring
- Neuroticism
- Curious
- Tech-Savvy

Goals

- Check students' progress and performance to ensure they're all on track.
- To encourage student engagement.
- To easily distribute lessons and communicate with students well.

Frustrations/Pain Points

- Struggles with how to improve the students' performances in group activities/projects outside the classroom.
- Got complaints from students that they aren't able to find a quiet space on the campus to work on their group projects.
- See her students couldn't do their homework and study for tests because they don't have a quiet area to go to.

Bio

Chelsea is an Associate Professor at the University of Washington. She is on the way to gaining her experience, completing the credits to achieve her doctorate degree, and becoming a full professor. She's very passionate about her teaching career and always strives to help out with students' needs. She believes that every educator should be able to use an effective technology platform that could help both them and the students work together well, especially since everyone is living in the world of technology now. Chelsea also wants to improve her student's performance and engagement in group activities/projects outside the classroom through online and campus resources.

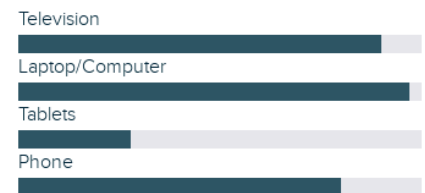
Motivation



Favorite Brands



Device Usage



User Persona 2:



Solutions Considered

Solution 1

This solution is an app called DubStudy that allows not just students but also all faculties with a valid NetID at the University of Washington to access it. The very first step of the app is allowing the user to log in with their UW NetID, then it will start checking their location. After locating their position, it will show all nearby study rooms or spaces within buildings, mapping the fastest direction and showing where people go. There will be features like noise level, the number of people, and a number of seats taken if it's a study room showing up for each available space in the app. Some advantages that the app has are previews where the user can see the 3D view of the room, and information about materials available in the rooms (number of chairs and table, monitor or DVD/VHS player, TV, writable boards...). There will also be an extra tool in the app to allow students to check out more accessories (mouse, chargers, cables, adapters...) online. Some disadvantages the app has are the speed of updating the number of people and seats taken might be slower than what was expected, and unable to utilize it if the user has low data or no wifi.

Solution 2

This solution is a website. Students can log in with their UW NetID and gain access to a homepage that would display a map along with markers indicating study rooms. Students can click on a certain marker and it would redirect them to a page showing them a summary of the study room they clicked on. It would display directions, a summary of the general atmosphere, noise level, traffic, resources, and reviews. If the study room they chose is a private/reservable study room, they can reserve it through the website. The advantage of having a website is that users can just search up the site on their computer or their phone. It would also have a broader reach since websites are easier to access. A disadvantage of a website is that websites aren't as good with features like GPS. Another disadvantage is that students would not be able to access the website offline which is an issue some might run into if they are on the go and do not have a strong internet connection or one at all.

Solution 3

The solution is data visualization. These data visualizations will be displayed on a tablet or screen at every major library at UW. The screen will show a graph of every study room in the library, where it is located in the library if it is currently being occupied, and when it will be available. Students can then select a vacant room to reserve it right then and there, or select an already book room and reserve it at a later time. The advantages of having this in library data visualization would be that students wouldn't have to sign up or go through the hassle of using their phone or computer to reserve a study room, they can just walk into a library and reserve a room. However, there are some drawbacks to this solution, one being that if a group walks into the library and every room is taken the group may have wasted their time walking there when they could have just looked online. Another disadvantage is that it only shows libraries' study rooms and not all of UW libraries' options for study rooms.

Solution 4

The solution is a subscription service called DubStudyRooms, this service allows students to sign up to get messages texted to them when certain libraries have a lot of study rooms available. To start, the student will enter their mobile number into a database and they will receive a text message asking them to confirm if they want to sign up for reminders. It will prompt them to select if they want to receive a notification for when the library study rooms are 100% available - 0% available, they will then select which libraries they want reminders for. Students will then start to receive notifications based on their preferences for available study rooms. The advantage of having this subscription would be that students wouldn't have to put in any additional effort besides just signing up for the subscription. However, there are many drawbacks to this one being there would be no instant answer to if study rooms are available. Another drawback would be that there could be that amount of rooms left when the notification is sent, however by the time a student would get to the library the rooms could be all full.

Selected Solution

Out of all of the proposed solutions, the app is best suited for DubStudy. Since DubStudy is about helping students find study rooms across campus, it requires the use of GPS, which is most convenient on a mobile device. With an app, a student would be able to get directions to the study room of their choice and follow the directions on the way to the destination. An app is also more useful for this type of application since being able to access it on the go would be very beneficial. In terms of advantages, GPS works a lot better on a mobile application rather than a web-based one. Students would also be able to access the app offline as well. They can also receive notifications for when a private study room is available or if the study room they like has too many people in it currently. It stands out as the best solution since it's the most compatible solution for the idea. Having an app is the most portable and convenient solution, which is preferred since the idea incorporates finding an area and being able to get to that area using directions.

Description of Your Solution

The DubStudy app is going to have three main functions, that being the convenient search platform for all study spaces on the campus, location accessibility, and more tools to do an in-depth look at the study rooms to see if it has things like (electronic items for check out, a 3D view of the room, etc). The first stage of the DubStudy app is for the user to log in using their UW Net-ID, while quickly following up with a request for the user to grant their location to the app. The reason why location is needed for the app to work to its full potential is, through our research and common knowledge, we have found that people want everything done for them in one app and don't want to be constantly switching between apps. With that being said, having a location in the app would make it so users wouldn't have to know off the top of their heads which study room locations are near them or have to look it up; they could just turn their location on in the app and the app will tell it to them. After the user then accepts the request for location accessibility the user can then pick which study room they want from a list that comes up based on their location. This list however can be whittled down to more specific options using the convenient search platform, as users can select certain things they want in a study room and filter out things that they do not want. We decided to add this feature of having a specific search because of what we found in research, where users want full customizability and control of what they are searching for, if the user can't filter what they are looking for they may get annoyed and not use the app as they don't want to spend a lot of their time clicking on different rooms and investigating them. While they are filtering out the rooms, the user can also click on the room and receive a description of what's in the room and also a 3D model of the room that they can interact with and look at. The reason that this was a necessary feature for DubStudy was according to research many times users are not happy with products they cannot visually see as what they perceive is not actually what it really is. DubStudy completely gets rid of that problem by giving users the ability to see the room. After the user has filtered the study rooms they want and looked into them, they can now select which room they want to book, and using the location tracker that was discussed earlier a map pops up with a GPS to the study room in which they booked.

Primary Features

Location Accessibility: Based on user research, we added the location accessibility feature to our app. This feature allows the app to automatically detect the user's location and display all available study spaces near their current location on the home screen. This helps users quickly and easily find a suitable study space nearby, improving their overall experience with the app.

Study spaces' search: Based on user research that shows how some students are having trouble finding study rooms, we added the feature of study space search to our app. This allows users to easily locate available study spaces near their current location, providing a convenient and efficient way to find a suitable study space. By clicking on a specific location, users can access detailed information about the space, including its description, attendance level, user reviews, and accessibility. This helps users make informed decisions about which study space to choose, improving their overall experience with the app.

Secondary Features

User's support: Besides the suggested and frequently asked questions about the app, there is also an AI platform chat where the users could type out their questions and get quick answers from DubStudy. This way every app's user would be able to unite all of their confusion in a short time period while utilizing DubStudy.

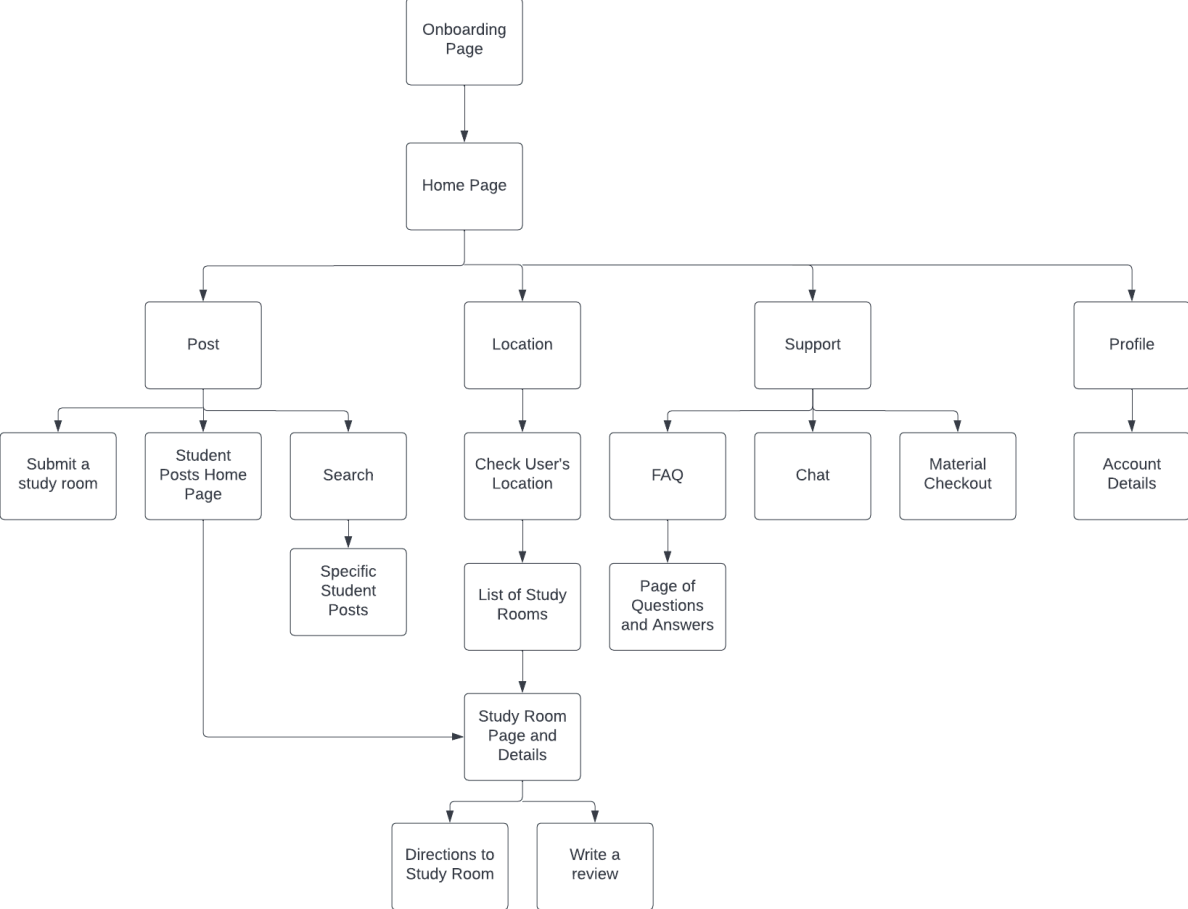
User Reviews: The addition of user reviews and ratings for study rooms is because of user research that showed that students value the opinions of their peers when choosing a study space. User reviews and ratings can provide helpful information about the quality and popularity of different study rooms, which can help students make more informed decisions about where to study. Additionally, the rating system can provide valuable feedback to the library staff, helping them identify areas for improvement and better serve the needs of the student body. Overall, user reviews and ratings can help create a more user-friendly and efficient study space selection process for students.

User-submitted study rooms: The addition of the ability for users to submit their own study rooms is based on user research that showed that students have a hard time finding study rooms on campus. Allowing users to submit their own study rooms can help to expand the selection of available study spaces, providing students with more options to choose from. Additionally, allowing users to submit study rooms can help to ensure that the app remains up-to-date and accurate, as the library staff may not always be aware of all the available study spaces on campus. Overall, user-submitted study rooms can help to make the app more comprehensive and useful for students.

Traffic indicator: The addition of a traffic indicator for study rooms is based on user research that showed that students often want to avoid crowded study spaces. The traffic indicator can provide students with real-time information about how busy a particular study room is, allowing them to make more informed decisions about where

to study. Additionally, the traffic indicator can help students to avoid wasting time traveling to a study room that is already full. Overall, the traffic indicator can help to make the study space selection process more efficient and convenient for students.

Site Map

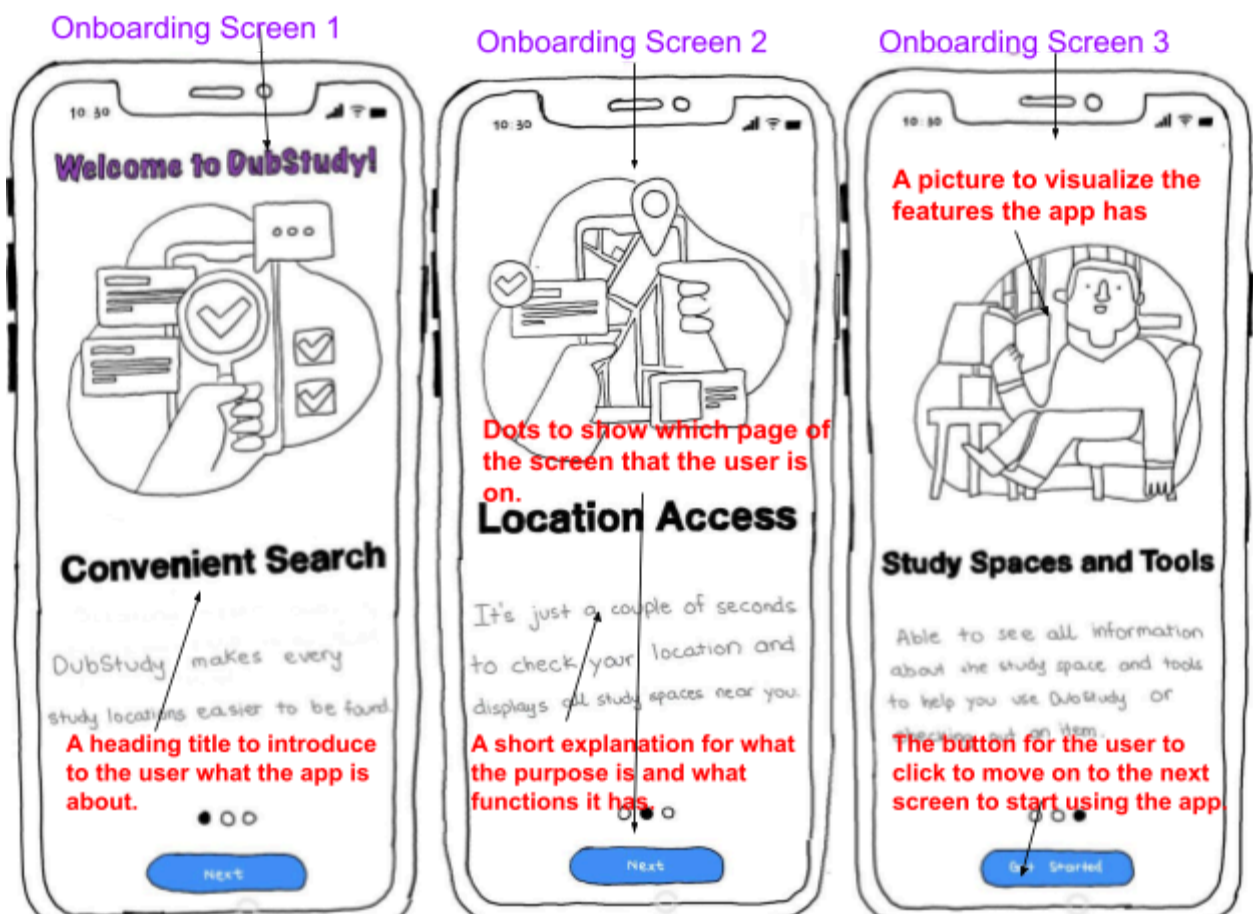


Low Fidelity Wireframes

Onboarding Screen / Screen 1

There are three onboarding screens for DubStudy to help introduce the users to what this app is for and its functions in helping them to solve their problem of finding a quiet space to study at the University of Washington. Each of the screens would have a picture visualizing the function, a heading titled, and a short description of how the app is working or the benefits of the functions.

This kind of format shown in onboarding screens would attract people to read and understand DubStudy quickly since it only has a total of three taps to start using the app. Nice visual pictures and short sentences make it easy to read because it only takes a few seconds.

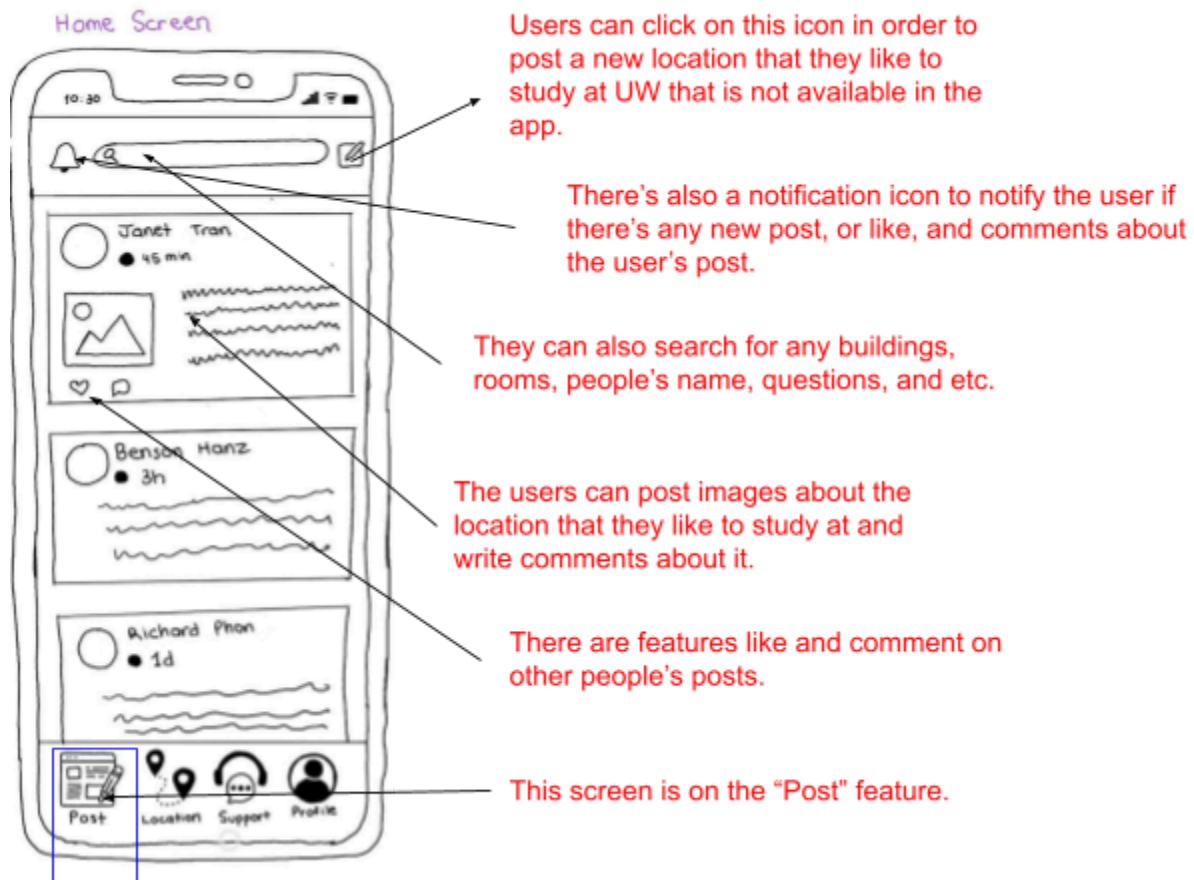


There are three onboarding screens with pictures and a short explanation of DubStudy

Home Screen / Screen 2

DubStudy's home screen is basically a "posts" feature that allows all users to post or check out more information about the study locations on campus that they don't know about. There is another main search study spaces tool besides the "location" feature. This function is included in the app to add a broader source of information related to study locations so that the topic problem of finding quiet spaces to study would be covered completely.

Some tools on this feature are notifications, searching bar, and a posting icon. Notifications are for new posts, likes, and comments about all users' posts. The search bar is for the users to look up buildings, rooms, people's names, questions, etc. And the posting icon is for the user to add their posts, and share pictures, and opinions/comments about a study location that is not available in DubStudy. Therefore, the users could feel free to do whatever they need to do to find for themselves a compatible place to study.

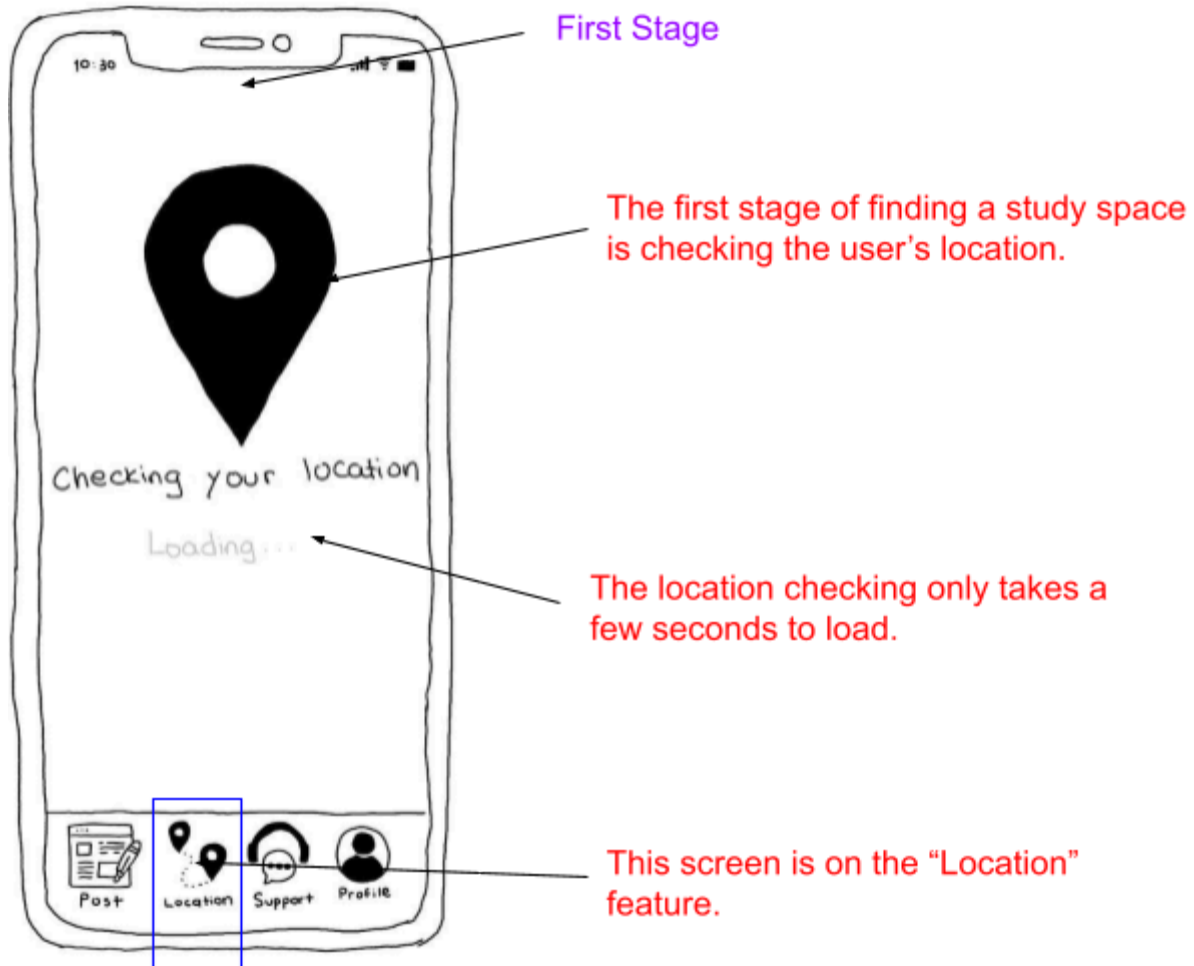


The home screen is also the post feature that provides users about other study locations

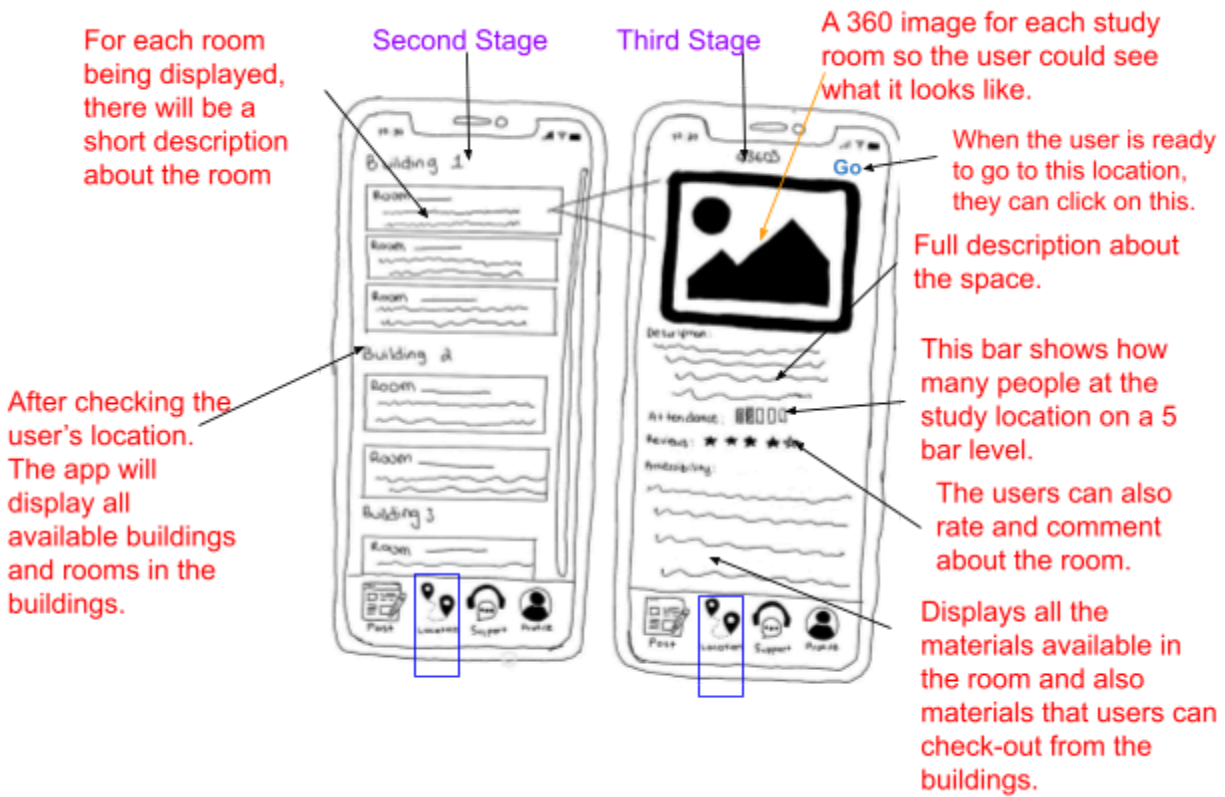
Categories Screen (location feature) / Screen 3

As discussed, another main function of DubStudy is the “location” feature where the app locates the user’s location and displays all study locations near them. Then the users are free to pick the location and hit the “go”. The screen will then transition into the direction screen which helps point the user to go where.

Before picking the location, they’re also able to see some preview information like the 3D photos of the rooms, description of the location, accessibilities, attendance level, and other users’ reviews.



The first step of the location feature: checking the user’s location.

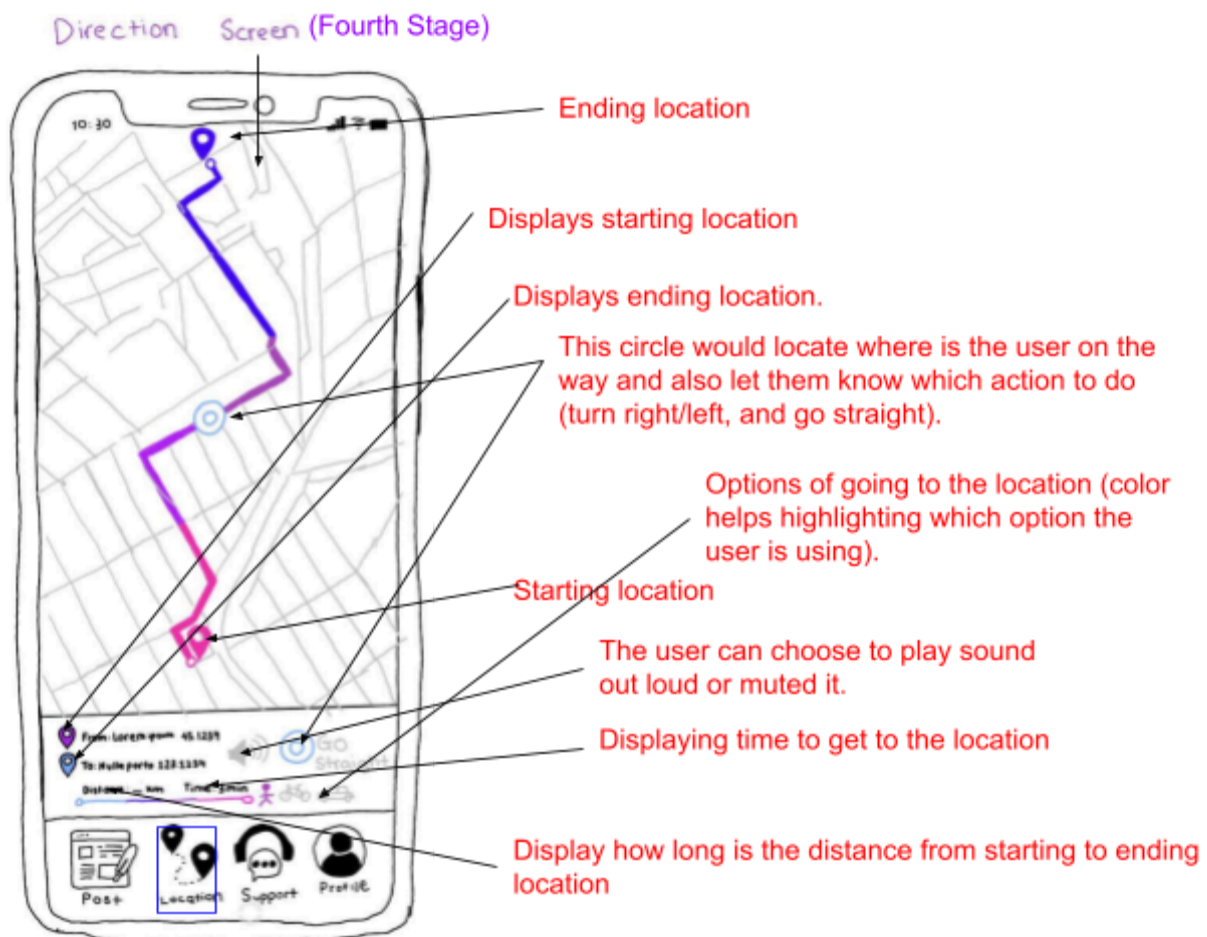


These stages are displaying all study spaces near the user's location which connects to the direction screen.

Direction Screen (location feature) / Screen 4

After the user has clicked the “go” button in the third stage of the location feature then the app would transition into this screen which helps show them where to go next to get to their desired destination. Some information shown on this screen is starting and ending location, distance, and time to get there.

Another great thing on this screen would be the blue circle representing the user on the way there and the sound function helping them know the actions that they need to take. The users could feel free to choose other options to get to the destination like biking, and driving.

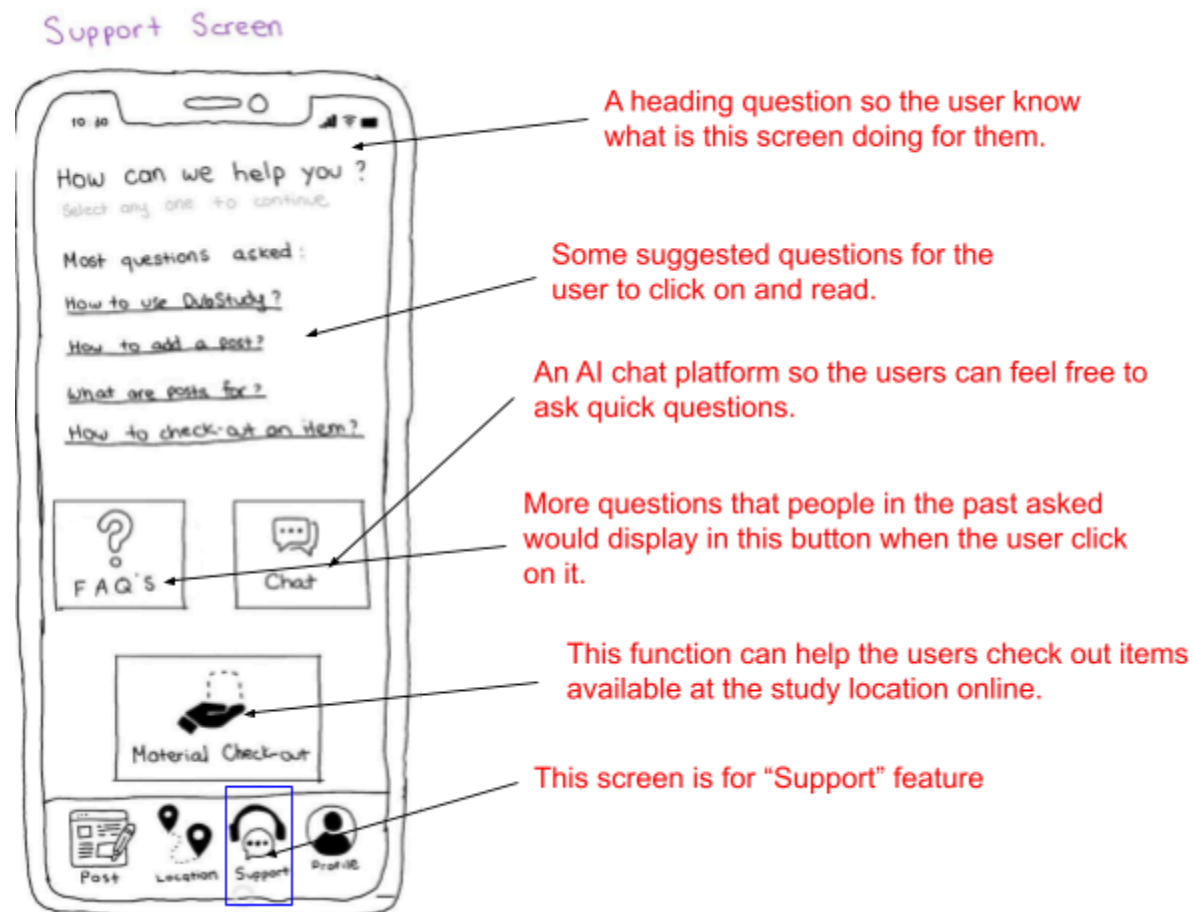


The direction screen positions the user and sends out signals to help lead people to get to the location.

Support Screen / Screen 5

This feature is for helping and guiding the users who utilize the DubStudy app if they ever have any confusion. There are two options in this feature including frequently asked questions, and chatting with an AI. Both are helpful but the chat might be faster because it will automatically answer someone's question after a few seconds. However, the FAQ is more detailed because this is where real people answer the question more thoroughly and accurately since they have already experienced it. Therefore using both would fulfill most questions to be answered for the users.

There is also a function at the bottom of this screen letting people check out items available online at the buildings so that the users don't have things in their way of doing their work or studying at the location.

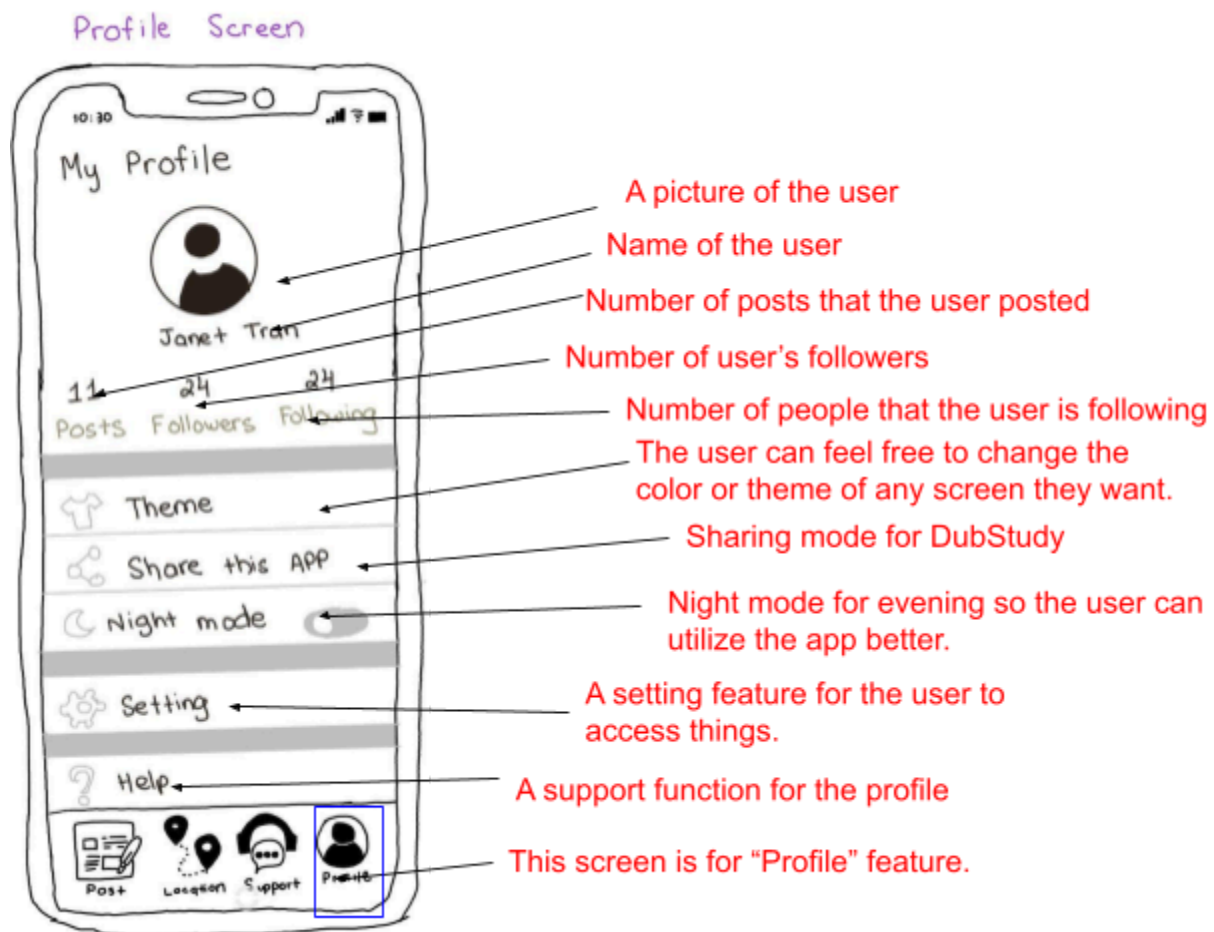


The support screen is a function of the app to support the users in using DubStudy.

Profile Screen / Screen 6

Profile screen is included in this app to help create a personalized experience for the users. Here they can have a short bio, a unique profile picture of themselves, and their names. This screen also displays the number of the user's posts, followers, and people that they're following.

Other great things are that the user is able to change the theme that they like, and the night mode so that the user can use DubStudy better in the dark or in the evening. There are settings and help functions for the user's information, and profile support. Also to share the app with others easier, they can use the function of "share this APP" so that everyone can get their problems solved.



Profile screen is another function of the app letting the user feel free to change stuff around and display their information.

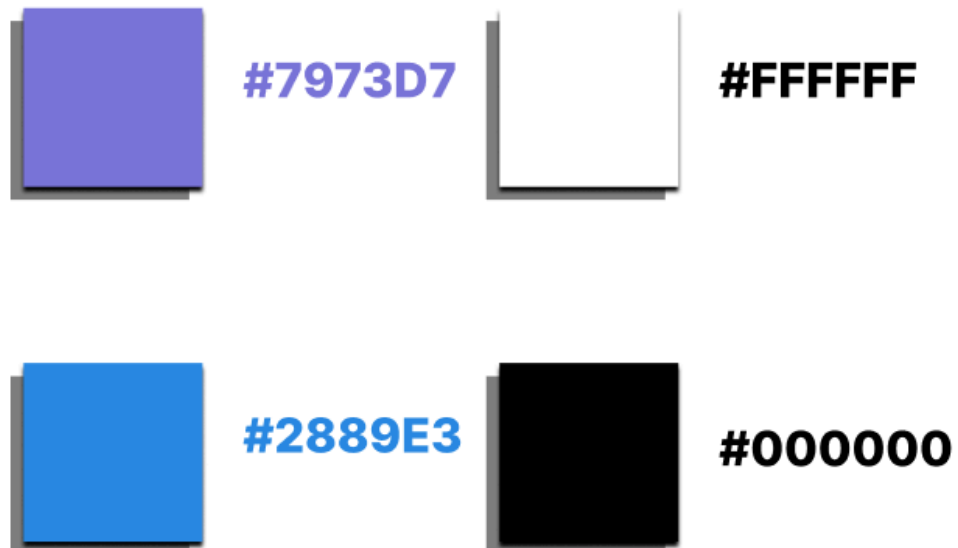
Low-Fidelity Wireframing Stage

The group received feedback that more signifiers were needed to make the icons and buttons on the screens easier to use. This was particularly important on the location screens and the map screens, where the icons at the bottom were all over the place so it would be hard for the user to click or understand what those icons mean. Other comments are about adding guidance for the features so it could support the user in knowing how to utilize them. In response to this feedback, the group made revisions to the low-fidelity wireframes, including adding more screens, signifiers, and real texts or images to make the prototype more user-friendly. Additionally, the group made changes to the buttons and the symbols used to represent features in the app, in order to make it easier for students to understand and use the various functions of the app. These revisions were based on insights gained from user research, which helped the group to identify the problems that students were facing and develop solutions to address those issues. By incorporating user feedback and making these revisions, the group was able to create a more effective and intuitive prototype that addressed the needs and concerns of the users.

Colors

This app uses the following colors: 7973D7, FFFFFFFF, 2889E3, 000000. We chose the colors 7973D7, FFFFFFFF, 2889E3, and 000000 for our project because they create a visually appealing and cohesive color scheme. The combination of a bold, vibrant purple (7973D7), a crisp white (FFFFFFF), a bold blue (2889E3), and a bold black (000000) creates a modern and professional look that is well-suited to our project. Additionally, we chose the color 7973D7 because it is similar to the University of Washington's colors, creating a sense of connection and alignment with the university that is common among many UW-associated applications.

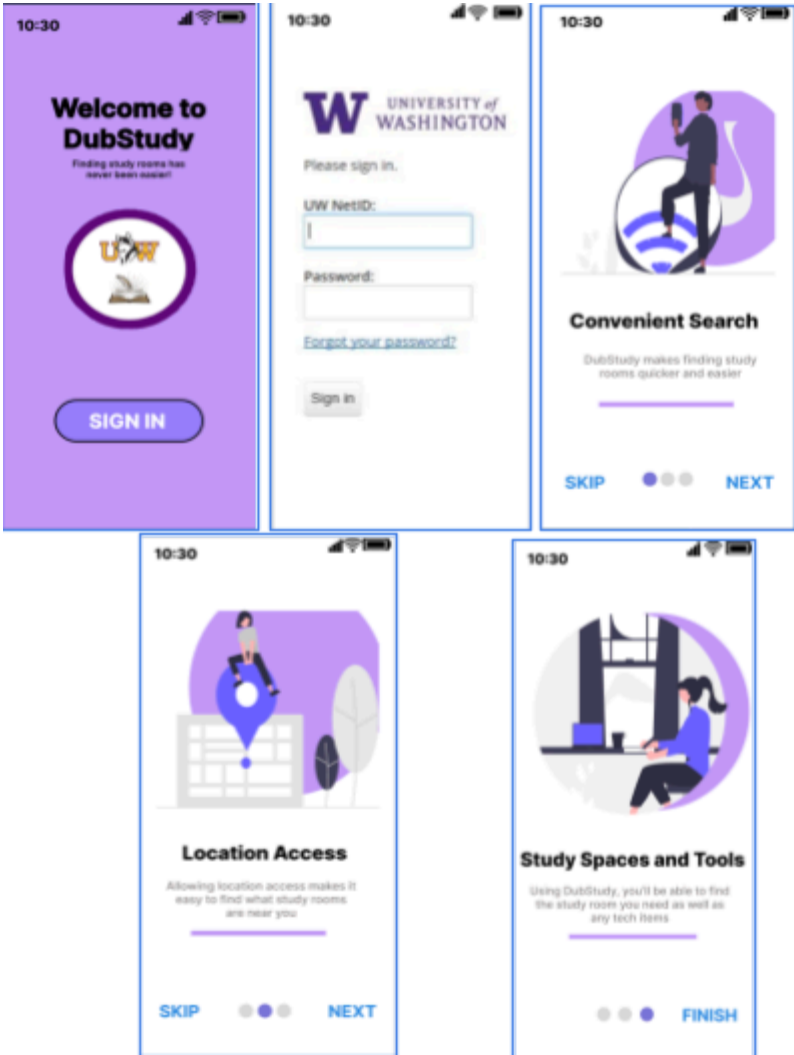
Final Color Scheme



High-Fidelity Wireframes

High Fidelity Wireframes

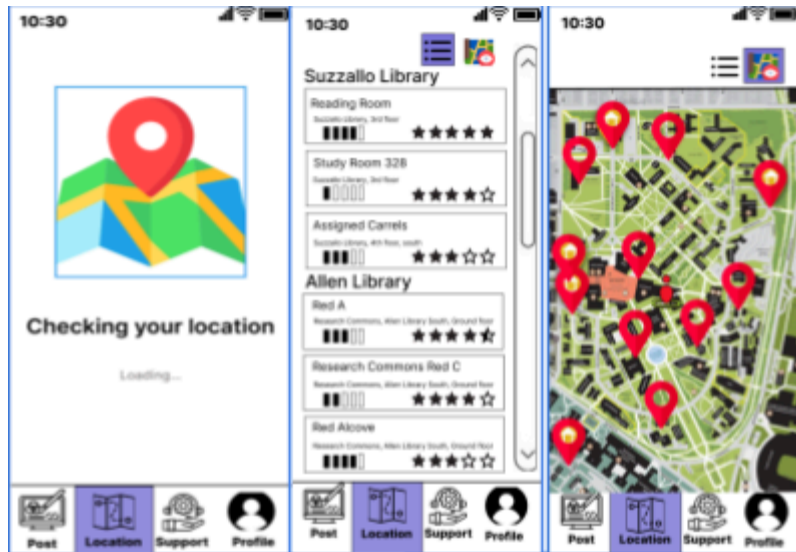
Login and Onboarding



Login and Onboarding Screens

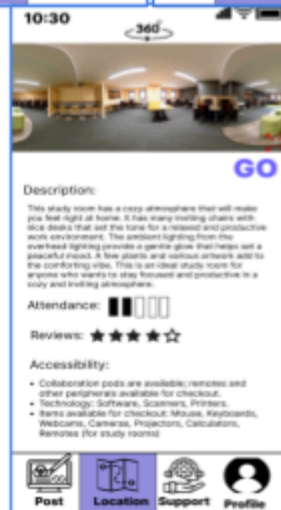
- The welcome screen features the app's logo and slogan, as well as a friendly-looking bubble "sign in" button.
- Allow users to sign in with their UW NetID.
- With friendly visual images and colors, the instruction screens assist in explaining what DubStudy is..
- Give the users the option to skip the introduction/onboarding screens.
- After the first use, there is no need to go over the introduction/onboarding screens again.

Location Screens



Location Screens

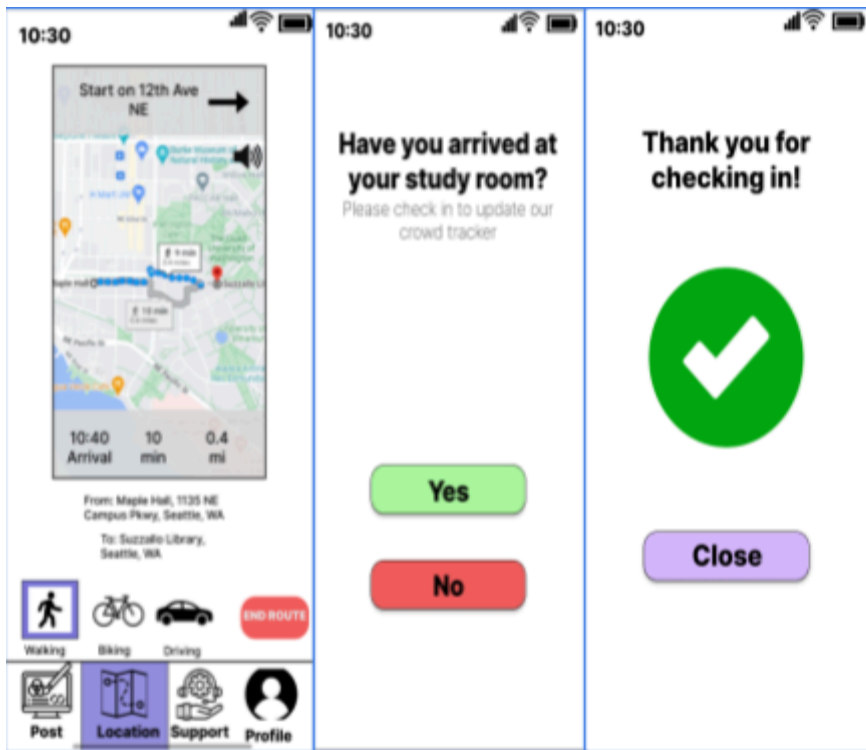
- Allows the user to see all the available study rooms near their location
- Users can choose between a list view and a full map view.
- Only when the user is using the app can GPS track them.



Study Space Screen

- Allows users to see a 360-degree view of the room, as well as its description, crowded level based on attendance, room reviews, and accessibility.
- The expand icon in the bottom right corner of the image allows the user to expand the photo for a full view.
- If the user wishes to proceed to this destination, they can select the "Go" button, which will take them to the direction screen.

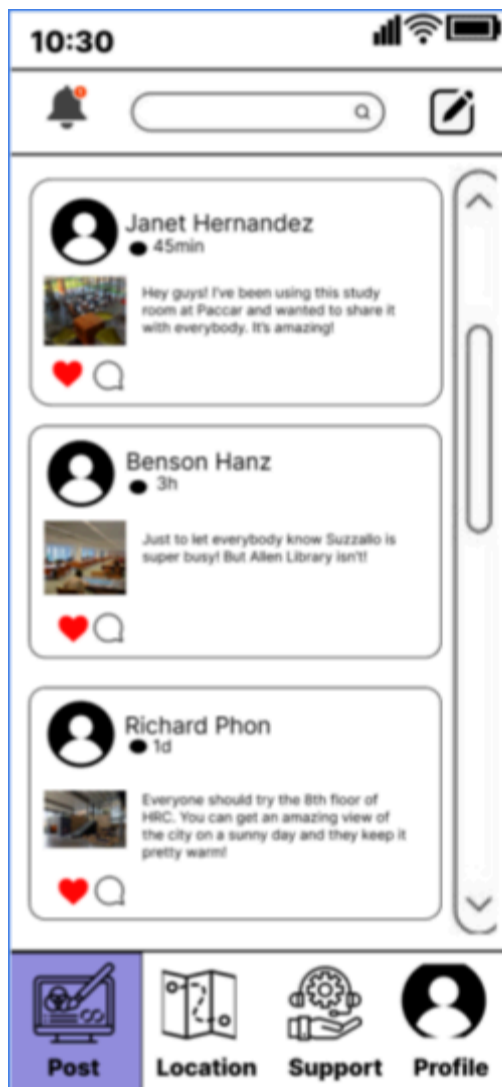
Direction and Check In Screens



Direction and Check In Screens

- The Direction Screen displays the user's arrival time, distance from the destination, and the signal on top of the map directing the user where to go.
- To get to the destination, the user has three options: walk, bike, or drive.
- After they press the "end route" button, it will assist them in checking in to update the attendance bar system.

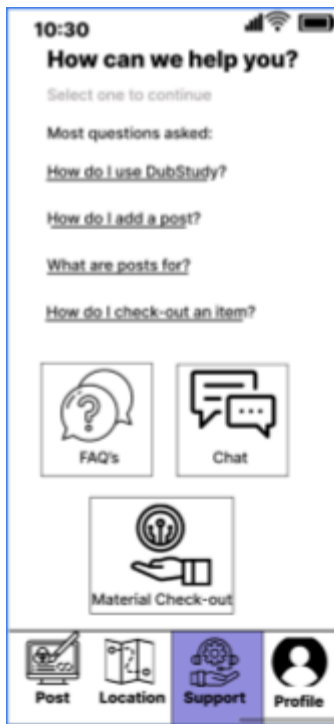
Post Screen



Post Screen

- Users are free to post any other study spaces that are not available in the DubStudy system.
- It will also function similarly to a social media app in that users will be able to like or comment on posts..
- Users can also use the search bar to look up the names of buildings, study rooms, and people.
- The screen's purpose is to provide more information about study locations on campus.

Support and Profile Screens



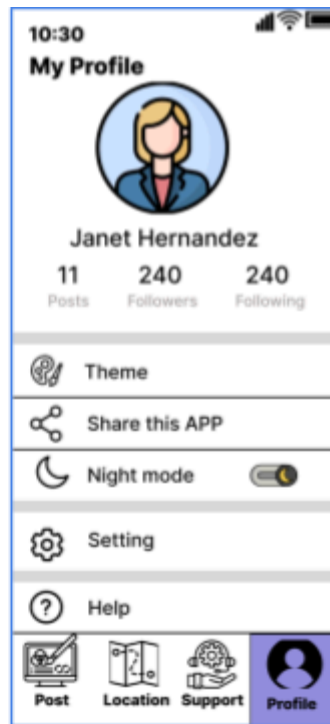
Support Screen

- Give users three options for assistance when using DubStudy.

- The FAQ option includes all of the frequently asked questions from other users.

- The Chat option involves an AI that will always be able to respond quickly to any questions the user may have

- The Material Check-out option allows users to borrow all of the materials listed in the "accessibility" section of the room description screen.



Profile Screen

- Users can change the theme of their screens and set their own profile picture.

- Night mode makes it easier to use the app in the evening.

- The "Share this APP" feature makes it easier for the user to share DubStudy with others.

- Includes a Settings and Help button to give the user more control over their app

Interactive Prototype

- App/Website:
 - The tool that the group used to make the prototype is Figma
 - Link:
<https://www.figma.com/file/9XNQRfQxmoM1rb2ULhLL5s/AF-1-Group---DUBSTUDY?node-id=0%3A1&t=FklooGhzxO9GI9fF-1>

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Appendix

Interview Notes

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(Accessed: November 6, 2022).

Crayon Bits, L.L.C. *UX Research Platform for product teams (User Interview 2), UserBit.*

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November 6, 2022).

Survey

INFO 200 Study Room Survey. Google Form. Google. Available at:

<https://docs.google.com/forms/d/1dDkRImbtne8izowNKfB9ScMcXF6DUrIXEn0W93Rx6E4/edit> (Accessed: November 6, 2022).