UNIVERSITY OF CALGARY

CPSC 481 HUMAN-COMPUTER INTERACTION

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Project Iteration 2

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1 Project Description

The WaitLess project idea revolves around improving the virtual academic advising experience for students by refining a virtual line up system. The current solution, QLess, has problems that will be addressed with our idea while also adding improvements to make lining up virtually easy and convenient. We expect our system to be used as a mobile application where students can virtually line up for drop-in advising at their university/school. This system will be used by the aforementioned students and **academic advisors** that will be conducting these line ups. The context at which we expect this system will be used under is in an academic environment between student and advisor. We don't expect the student to use this system daily, but we expect the advisors to use this system daily to provide guidance to students.

1.1 Stakeholders

- **University students** are the ones who will use this system to line up to get advice and counseling on their degree. Students can be split into two categories:
    1. Students familiar with the existing solution QLess have sufficient experience and background using a virtual advising system. Hence, would be more understanding when using our idea.
    2. Students NOT familiar with QLess do not have much experience or background with virtual advising and would need special attention to make our WaitLess solution more welcoming.
- **Academic advisors** are individuals who will be using this system to advise students and set up lines. Advisors are assumed to already have the requirements and experience of conducting virtual advising as well as background knowledge in QLess.
- The **University Administration** are stakeholders that will want to oversee the our system but will not directly use it.

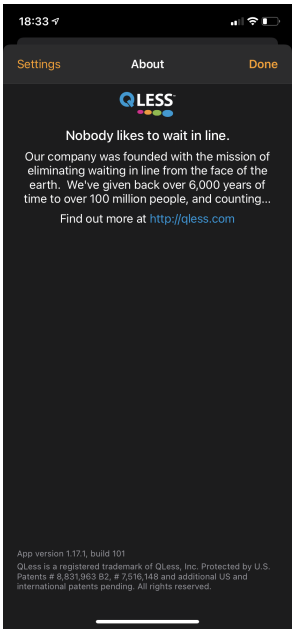
2 User Research

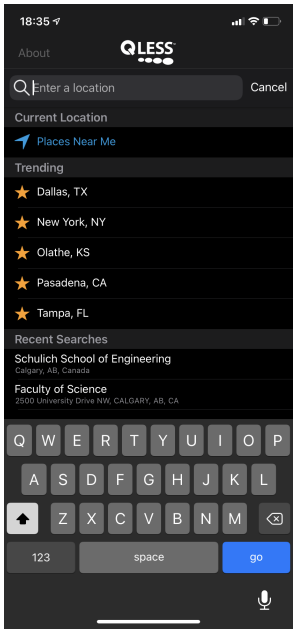
2.1 Competitive Product Survey

We used this IDEO Method Card to compare what we want to create as a product with the pre-existing QLess app. We were able to make comparisons and evaluate this product to create initial requirements for our app and make changes we deemed necessary. We were able to sit down with two University of Calgary students and get their feedback on the QLess app. Instead of giving our participants a traditional survey, we instead allowed them to test the app and give feedback with each step they took.

Justification: This method provided much needed detail in understanding the processes the user takes and what problems come with their interactions. By using a competitors product, we were able to understand the most logical processes needed for the users and what needs to be displayed during each step. Our participants were able to evaluate this product and provide us with what they like and dislike. This information can be used to create our functional requirements and standards we want to provide.

Images:





Summary: From using this method, the following was brought up that the users identified as issues:

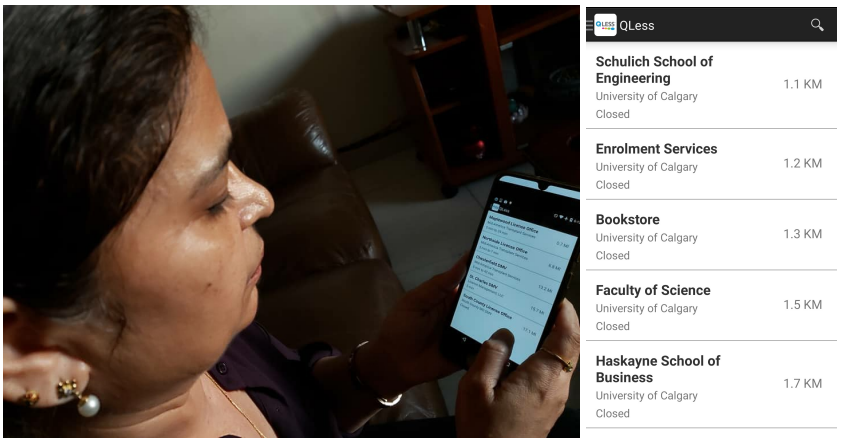
- An "About" label at the top left that provides no valuable information, except a way to get to settings.
- Can't access settings unless you are on the home page.
- Constant "refresh" animation covering the first place.
- Need a more tailored location selector. Being offered places that are nowhere near the user.
- Difficult to locate academic advisors as a line. Need a student specific menu.
- Multiple UI menus needed for joining a line. Could be simplified to 1.
- Information is not retained from joining lines in the past.

2.2 Extreme User Interviews

We used this IDEO Card by identifying two groups of individuals. Those extremely familiar and those completely unfamiliar with the QLess App. So we first interviewed students who changed their Program of Study at the University of Calgary and had subsequently made regular appointments with Program Advisors. For the second group, we talked to the parents of one of our teammates to get an idea of solely the design of the app as well as first-year university students to get a better idea of the actual application functionality and evaluated their overall user-experience.

Justification: This method successfully highlighted key design-centered issues in the QLess App since observations from user-groups were unique and different from an average user. Non-Regular users gave us their first impressions of the app allowing us to learn the problematic design features that stood out. The Regular users were able to identify the problems they regularly run into allowing us to learn about potential quality of life improvements. Both views helped narrow our focus towards uncovering new design ideas that we could implement in the improved application.

Images:



Summary: The following issues came to light:

Regular Users:

- Setting up appointments for a second time asks for the same data to be input which users find extremely time-consuming.
- The app doesn't allow re-using previous inquiry messages from the user. Users feel this would help them organize their thoughts and questions for the next meeting.

Non-Regular Users:

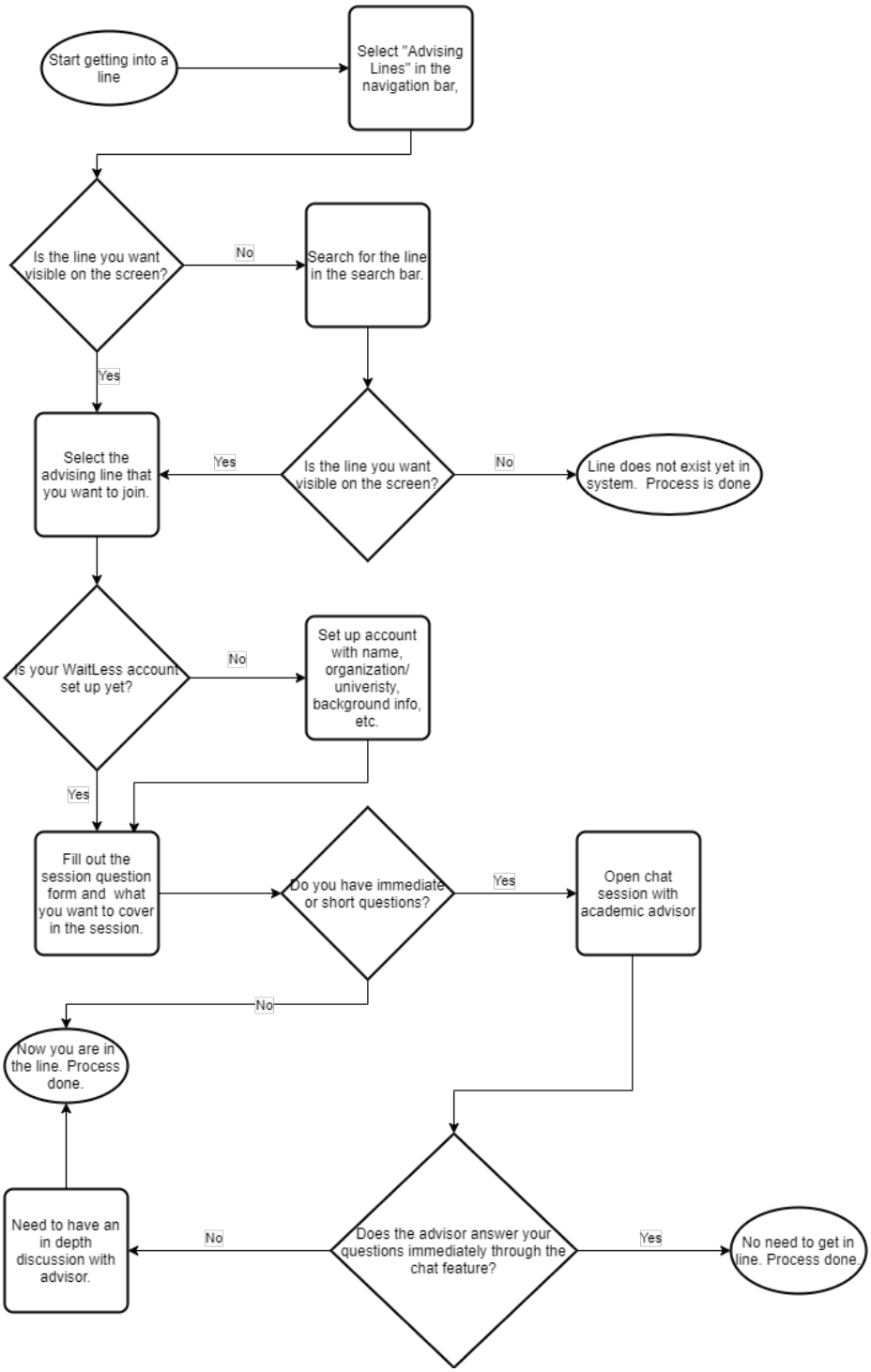
- The UI is very dull and boring to look at.
- The app could make use colors to help identify/differentiate different faculties
- The list of faculties is not alphabetical making it difficult to find a specific program advisor quickly.

2.3 Flow Analysis

This IDEO method card was used in our research by drawing out the process flow that listed out the steps of putting yourself in an drop-in advising line. Draw.io was used to draw this diagram, and the current solution (the QLess) app was used to get a baseline of what the process should look like. Our group then added, removed, and updated certain tasks as we responded to some of the feedback received in our user research.

Justification: This research method is appropriate because our idea is built on enhancing the **process** of getting in a virtual line, and so outlining and understanding how that process works is of great importance. In our flow diagram, important tasks and decisions that a user should make while getting into the virtual line have been clearly defined, demonstrating how the experience should unfold and what improvements to include.

Images:



Summary: The following list is what we have learnt using the Flow Diagram IDEO method:

- Stripped down the process of getting into a virtual line for academic advising. Identified important tasks, decisions that a student should do in order to get into a line.
- Determined alternative endpoints/end-goals for the lining up process. These alternative end goals keep students needing short answers out of the line.

- Introduced possible improvements in the lining up process by having the student submit their question before they get in the line, so the student and advisor can reduce session time and shorten the line.

2.4 Reflection

What went well: The pool of interviewees we were able to interact with was perfect for this research as it included people of varying demographics and gave insight to different perspectives that will help make the improved app more accessible. Despite the limitations we faced due to COVID-19, online video-calling was efficient in providing us with the required information.

What went poorly:
Our group did miss out in surveying the advisor stakeholder in our application due to late response time and survey launch.

What would you differently:
For the next user research round, we will make sure to send out the survey at a much earlier time to get input from the advisors (for now informal input will be used, user research would not be included in this iteration).

3 User Tasks

3.1 Must Be Included

- The user must be able to log in once and join a queue without going through any additional steps. The process of joining a queue is the main task that the app performs, and going through unimportant steps before joining a queue can cause frustration for the user.
- The user must be able to search and browse for different queues to join. This task involves the user having an option to freely browse queues and also search for specific queues. This task must be included in our application because it allows for users to find their desired queue quickly.
- The user must be able to access a FAQ page for queues and/or be able to access a chat system to be able to get information about the queue before joining it. This task is essential because it will allow for a better user experience and also reduce excessive joining and leaving of queues.

3.2 Important

- The user should be able to sort the current lists on the screen in a variety of different ways. For example, from our research, we discovered that it is important for the user to sort information how they wish in order to quickly find what they need.
- The user should be notified by the app on their position in the queue. As they get closer to the front, notifications would become more frequent, however they may could change this setting to meet their need.

3.3 Could be Included

- The user could access a general ”about” page that contains more information about the app. This task could provide a good baseline of information for the user.
- The user could access a history of queues they’ve joined in the past. This allows for better communication between the user, application provider, and the queue provider if support is ever needed for the user.

4 Appendix

- The flow diagram developed for user research method 3:
  https://drive.google.com/file/d/16ddIZvUR3_-kqVZJkqin7AnFHgq5H2P3/view?usp=sharing
- Sample of your interview questions
  Interview Questions for the Extreme User Interviews
  - Do you feel like the design of the QLess App is welcoming?
  - How easy do you feel it is to navigate the QLess App? Why?
  - What do you like least about the QLess App?
  - What do you like most about the QLess App?
  - How easy is it to use the QLess App? Why do you think so?
  - Which feature on the QLess App is least important to you?
  - Which feature on the QLess App is most important to you?
  - What is the most important feature you think we should add?
  - Is there anything else you would like to share about your opinion on this app?

5 References

Ideo cards: http://hcitang.org/uploads/Teaching/ideo-method-cards-2by1.pdf
QLess Application: https://www.qless.com/

6 Links

Here is the link to our GitHub Repository: https://github.com/RMcCurdy/TeamS_Project
Here is the link to our GitHub Pages Portfolio: https://rmccurdy.github.io/TeamS_Project/