Medium Fidelity Prototyping

Prototype Video:

Parking App Prototype and Task Description
https://drive.google.com/file/d/17KDMSkbj6kqyDOrKRm3uc3OCjsJ-6vgL/view?usp=sharing

Prototype Description:

Our prototype illustrates the main functionality of our application. It features an accordion menu styling paired with a main map display. When not in the menu, users are presented with a map which would display their parking location along with navigation functionality. If the user enters the menu, several menu options stretch to fit the majority of the screen. We chose this pairing between the map and an accordion menu as it both follows design conventions and allows users to understand where they are within menu options. This is as it gives the appearance of the menu existing above the map, with the ability to be able to swipe the menu away to return to the map. Within our menu is the core of the functionality of the application. In total, this represents current spot listings, browsing, creating listings, settings, and a homeowner dashboard. We believe that including these features in our prototype, along with each option's sub-functionality allows us to accomplish all of our design requirements as outlined in Assignment 2.

In our second assignment, we outlined key design requirements in order of importance. One requirement considered of the highest importance was a listing of all available parking with sorting options. In our prototype, if the user navigates from the menu to 'Browse Listings', we can see success in regard to this particular design requirement. Listings are clearly displayed, and the concept of how sorting functionality would operate is displayed. Another feature we believed was of the highest importance was the implementation of a dashboard for users to manage their parking spots. This requirement had an implication of two separate features, which we have both fully outlined in the prototype. If the user navigates from the menu to 'My Spots', we can see all available spots the user is currently renting out. If the user navigates from the menu to the 'Homeowner' dashboard, we can see all spots the user is currently listing on the market. Through these two features, we accomplish the goal of displaying all parking spots for a given user. One feature we decided was of medium importance was the ability to report problems and rate parking listings. This is also a feature which was implemented in the prototype. If the user navigates from the menu to 'Browse Listings', the user can see community ratings for all available parking listings. Furthermore, if the user navigates from the menu to 'My Spots', it has been outlined how rating a spot would be implemented. Finally, the feature we decided was of low importance was the ability to customize the application. While the limitations of our prototyping software begin to show, we have still displayed how this would be implemented in the final product. If the user navigates from the menu to 'Settings', we can see how various switches could control what the user would like on or off. As listed, we believe we have implemented all desired design requirements in our prototype.

Evaluation Plan:

a. What is the goal of our user-evaluation?

Following our initial research, we now want to begin performing user research on our developed prototype application. Many things are important to learn at this stage, as this is our first real experience testing our application with outside users. This results in many learning goals for this user-evaluation. Firstly, we must make it a primary goal to learn if any design concepts are difficult or confusing to users. As we have been the ones developing the application, we are essentially blind to this aspect. These difficulties can include not understanding where things are located, taking an unacceptable amount of time to complete tasks, or struggling to remember how our application works after a rest period. We will also want to pay close attention to any errors made by the user. Any time a user makes a mistake, we must study this and decide if there is any way to design our application to minimize or reduce the risk of this error reoccurring. Finally, we should note any aesthetic concerns a user has, along with any other positives or negatives regarding overall satisfaction.

b. What evaluation methods will we employ and why do we think those methods are appropriate?

We will be using ethnographic research followed by an interview. This will be performed in a controlled environment. This method proved successful in the earlier research phase of this project. We believe this is an appropriate method as it allows us to see participants interact with the design before asking our questions. This way, we will be able to identify user difficulties even if our participants do not explicitly mention them during the interview.

c. How will we go about a single evaluation session – What are the steps?

1. Participants are asked to perform 3 tasks within our prototype. This is done with as little guidance from the interviewer as possible. The tasks are (1) to use hourly-based parking, (2) to subscribe to lease-based parking, and (3) to create a listing. Note that these tasks are the same as in our initial research, with the key difference that they are now to be performed using our solution rather than existing marketplaces. This will outline the differences and help compare our design to existing tools.

2. After the observation part, open-ended questions will be asked of participants. The questions will directly relate to their experience with our UI while performing the tasks in the previous step. This will include but is not limited to the following questions:
    a. What were your thoughts on the overall design of the prototype?
    b. Did anything strike you as particularly confusing, and why?
    c. (If the user made an error) Why do you believe you made this error, and did you find the error straightforward to correct?

d. Based on your experience with the prototype, would you be inclined to use the finished product? Why or why not?
e. Do you have any other questions or concerns regarding the design and concepts outlined in the prototype?

Given the intention of a semi-structured interview, these represent mere talking points. We intend for many more sub-questions to occur in the real interviews.

d. Are there certain problems or challenges we anticipate?
Participants might be reluctant to point out areas of improvement. This could happen if they are embarrassed to admit they did not understand some design elements, or if they are afraid to come across as impolite and rude by pointing out flaws in the design.

e. Do we have solutions for those problems?
Observation during task execution will help us identify these areas of improvement as participants will not be able to pretend they know how to complete a task while not given instructions. If they fail, we will see what layout slowed them down or where they got stuck.

f. What kinds of data do we want to collect?
With the sample size we can afford to survey, we will mostly be looking for qualitative rather than quantitative data. We need to get a lot of information from our few participants. Open-ended questions will therefore be most appropriate.

WEBSITE LINK:
https://onlineacademiccommunity.uvic.ca/androids/medium-fidelity-prototyping/