CS325
Project 4.10:
Final Report

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1. Development process

Observing the rate of use of the UMass facebook rideshare group and considering the fact that this platform is not specifically designed specifically for ride sharing purposes, the idea came up to redesign the group to be more user friendly. The purpose of this project is to provide a user friendly ride sharing cell phone application that can be used by students attending the 5 colleges.

To start, we conducted requirement analysis and knowledge elicitation on our target demographic. We interviewed students on their ride sharing needs, usage of alternative platforms, and pros and cons of current platforms. The main features to be considered in our design were determined based on our findings.

Once the general features and frameworks of the design were decided, we then created a storyboard to showcase three representative tasks of varying difficult that demonstrate the overall functionalities of the app. The tasks demonstrate communication, the signup process, and searching and making a posts which were then tested by test subjects with prototypes.

For the initial round of testing, a low-fidelity paper prototype of the application was created out of paper and pencil. Three subjects were recruited on the campus who were observed while carrying out the three tasks on the prototypes while sharing out loud their thought process. Afterwards, they were interviewed on their opinion on the tasks and interface. Based on these results, changes and improvements were applied and reflected on a high fidelity prototype created in Marvel App.

2. Prototype tools

The prototype tool we used to develop our high-fidelity prototype is Marvel.

2.1. Pros

There are a couple of reasons for choosing Marvel as our prototype developing tool.

- Marvel can be used to design application on function different platforms, such as Web, iPad, and iPhone. This feature provided users a sense that they are running a real-life application.
- Marvel provides collaboration feature between developers allowing our team members to work simultaneously and remotely.
- Marvel has a number of initial design models, such as the iPhone X, iPhone8, iPad, Web, Apple Watch. Each model contains the different size of default wireframe which provided an easy start on the design process.
- Marvel offers functionality to link design pages with transitions by clicking certain area in the page, which gives a more accurate feel of running the application.

2.2. Cons

Our team had a great time using Marvel but with some objections

- Our team member had trouble resizing the prototype page and range layout of each item.
- To use for free, features are limited. In order to use full plan which contains fancier features, payment is required.
- Interactions, such as scrolling feature (used when setting time and date), had to be presented in a page by page manner.

3. Project reflection

3.1. Considerations

The overall results of users' interactions with our final design with the 3 tasks showed a positive feedback. However, more data needs to be collected in order to get a better insight of all the possible situations that might happen when users interact with the application.

Working with the high fidelity tool, Marvel App, was a good experience. The application is very user friendly and easy to use. Furthermore, multiple users can work on the project simultaneously making group work even easier.

The most challenging part of this project was working with human test subjects. Specifically, considering all possible approaches they might take when interacting with a system.

A lesson learned from this project is putting more time on converging the plans before making the prototype. Doing this beforehand would have saved time and effort.
It might be worth noting that the project did not consider the technical aspect of creating and coding the application and only focused on the design of the interface.

3.2. Overview

Three sets of user feedbacks including interview, low fidelity, and high fidelity experiments, helped improve the design of the application from a rough initial design to a more user friendly one. Subtle points have been captured through user's interaction with the application that were not noted initially. For example, when asking for optional

information, users either did not understand exactly how it would affect them or enhance their experience with the application. We then improved the design by putting a blurb that give extra information noting it how this piece of information is helpful.

Code link

https://marvelapp.com/3djh4ad/screen/35980101

4. Work Breakdown

- Michelle: Conducted hi-fi user testers, worked on presentation, and made video demo.
- Cici: Took notes for hi-fi user testers, made final change to prototype, worked on presentation and final reports.
- Jaeseong: Worked on the final report and presentation.
- Foroogh: Worked on the final report.