

Group A11

Lab 5: Usability Testing Plan

November 11, 2022

Evaluation Framework

1. Goals of the Evaluation

The goal of the evaluation is to provide the development team a sense of how usable the system is for new users. The test will allow the development team to adjust the system to fix any issues in usability that come up. Beyond this, the test will allow users to directly influence the final production of the system. Subjects will be able to provide input on their satisfaction and provide suggestions based on their experience.

2. Usability Requirements

Car owner

The UI for the car owner must give them an experience that replicates what they would have in the vehicle.

Viewing vital car information such as monitoring and location must be easy and quickly accessible. This information should be displayed in a visual way to support the information, if possible (ex. map for location of car) and with large text size. Any buttons are clear and stand out, such that users know what it is for and know to click on it.

Any manual actions by the user (ex. accepting requests) should be quick and easy to do upon being alerted by the app. These actions should display and deliver important information in a straight forward and summarized manner (ex. quick view of user rating, map view of route with big buttons with to accept (checkmark) or deny (x mark)) so that the user can go back to what they were doing quickly and with enough information about their car.

Rider

UI for the rider must make it easy and intuitive for them to get around and to their destination without obstructions. The system should encourage an easy check-out to secure funds quickly.

The booking process will be similar to the searching interface of Google Maps (in searching and destination selection) to make the system more intuitive and familiar.

When on route, similar to directions from a GPS, there will be audio updates of all actions the car takes

When on route, all button controls are displayed on the app for any commands of the user (direction and redirection, abort (large and quick accessible) and climate controls)

3. Questions

- Is the UI easy to use?
- Any parts of the UI/UX that we need to improve?
- Any features that you think are necessary but you don't see them in the UI/UX?
- Is any part of the UI confusing or misleading?
- What do you wish the system could do that it currently is not?
- What parts of the system seem redundant and don't need to be included?

4. Practical Challenges

We are testing the experience of both the rider and the owner, so there will be 2 different windows: one for the owner and the other for the rider.

- a. To help make which user they are supposed to be on clear. We will make the notifications of the owner very noticeable and eye catching
- b. We will have one person trying to figure out what task they are currently on and control the owner, while the other tests the rider part of the prototype (since there is more to do)
- c. In case only one subject shows up to the lab, we can be the owner and let that subject test the rider

Since we are testing the prototype on a PC and not a phone (which is the deployment platform), our prototype will be like a phone emulator with the app running on it.

Notifications will appear as the users complete each section of the scenario to continue the story.

We want them to engage in the prototype and talk to each other rather than make them feel like they are wasting their time coming to the lab testing nothing.

Testing Material

Sections 5 and 6 will be provided to subjects in separate printed documents.

5. Consent Form

Consent Release Form

I agree to participate in this study conducted and recorded by Group A11 in the CPS 613 course offered by Toronto Metropolitan University.

I understand and consent to the use of the recording of my usability testing session by Group A11. I understand that the information collected and the recording is for research purposes only, and that my name and the recorded conversation will not be used for any other purpose.

I understand that participation in this usability study is voluntary and I agree to immediately raise any concerns or areas of discomfort during the session with the study administrator.

Please sign below to indicate you have read and you understand the information on this form and that any questions you might have about the session have been answered.

Date: _____

Printed Name: _____

Signature: _____

6. Testing Scenarios

Introduction: You are the owner of a self-driving car and your car is registered to an app that allows you to make passive income by letting others ride your car.

You need your car every Friday starting November 11 2022 from 12:30 pm to 4:30 pm for getting to and from your part time job. You will only be working there until December 23 2022.

- a) Rider: You are in Downtown Toronto right now and just finished partying with your 6 friends. You live in Newmarket and you want to book a car to go home.
- b) Owner: You are the owner of the car and you receive a notification that somebody wants to use your car.
- c) Rider: The car arrives and now you are on route to your destination. It is toasty in there so you want to turn up the AC and get comfortable by listening to the radio.

Owner: This is the first ride your car is on, so you are very anxiously watching where it is and the general condition of the car

- d) Rider: Midway, you realize that you and your friends are hungry so you want to stop at a McDonalds to get some takeout. So you add McDonalds as a stop in your current ride
- e) Owner: You receive a request to make a stop at a McDonalds close to the route. You really want your car back before it gets too late and dangerous, so you say deny the request
- f) Rider: Disappointed that the owner declined the request, you send a message to them letting them know that they will be fast and they are very hungry after partying in the through the chat system
- g) Owner: Feeling bad for them, you decide to allow them.
- h) Rider: You successfully got your McDonalds and reached your destination. You are very satisfied with the accommodations made by the owner and the overall experience!