Minor Car Accident Assistant

HCI 430 / Professor Steele / Winter 2016

Group 2

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What we did

After developing our initial prototype, we developed wireframes to determine a workflow for users using the Fender app. From those wireframes we developed a low-fi prototype in Axure. From this low-fi prototype, we increased the fidelity by implementing features similar to those found in a fully developed application (e.g. navigational bar, actual media, etc.).

In order to gather feedback about the design of our app, we conducted tests with three users using our testing protocol. Our testing protocol consisted of 2 tasks.

Testing Plan Overview

The goal of the testing plan is to determine how usable the prototype of the application is. Usability is assessed by asking participants to complete specific tasks. Each of these tasks are tasks that the application was designed to accomplish. In order to accomplish the task, the test participant is invited to use a mid-fi prototype to carry out the task. As they work through the task, the participant is asked to think aloud and is prompted to answer the following questions (in bold). The purpose of each question is defined beneath each question.

- 1: Where would you begin this task?

    The purpose of this question is to determine how navigable the interface is. If a user is unable to determine how to begin the task, there may be an issue with the layout of the navigation or the naming convention of the prototype.

- 2: What do you expect to see when you press on _____?

    This questions provides insight into the expected behavior of the application. This is a crucial question because it provides a 'hypothesis' for what the application might

provide. This is illustrative of a user's mental model and thus allows us to identify potential miscommunication or missing elements in the design of our prototype.

- 3: [After pressing on the icon] Is this what you expected to see?

  By asking test subjects if they expected to see what is on the page, it is possible to determine if the actual design of the page matches their expectations.

- 4: What is happening on this 'page'?

  By asking users 'what is happening on this page', it is possible to determine their overall interpretation of the page - what the page is and what it is there for.

- 5: What does it look like can you do from this 'page'?

  As users see the next page, they analyze the features of the page to determine possible paths. This will allow for a comparison between the intended purpose of the application and the interpreted purpose.

- 6: What do you think of this 'page'?

  This is an open-ended question that allows test subjects to provide open feedback about the design of the page. Test subjects will typically refer to elements of the design that are present. This is valuable information as it helps to evaluate the design decisions made on each page.

- 7: Is there anything that is missing from this 'page'?

  By asking test subjects if anything is missing from the page, the design team can identify any areas of potential improvement that may not have been considered.

- 8: What will you do next?

Asking test subjects what they will do next provides insight into a user's workflow as they work to accomplish a task. This will help to identify problems in the designed workflow.

● Repeat questions 2-8.

Testing Audience

The testing audience for this test is specific to anyone who is a current driver who holds car insurance. The target audience for the application is for mobile device users who feel comfortable exchanging important information over an application. This narrows the target audience to users in their late teens to early thirties. No specific gender is targeted.

For the purpose of this test, most test subjects have personal relationships with members of the design team. While this is not an ideal target audience, it is accepted and acknowledged as a limitation of this test plan.

Below is the Testing Protocol Script, detailing what is said to subjects throughout the test.

Testing Protocol Script

Hello! We are a group of students at DePaul University who have been learning about prototyping and user centered design methods. We want to learn about the design of the app, Fender, and practice using our research methods. Fender was designed as a way to help people navigate car accidents and submit insurance claims. I did not design this - my feelings won't be hurt if you share your thoughts or feelings about it! We really just want to see how the design of it works and ultimately take what we learn from the test to identify ways for the team to improve it.

We will be giving you 2 tasks to complete. There is no right or wrong way to do the tasks. As you are completing the task, please say everything that comes to mind. If at any point you need to, or wish to, stop the test, let us know and we will take a break or stop.

Do you have any questions before we begin?...

Before we begin with the tasks, I'd like to ask some basic demographic information:

> *What is your gender? Male / Female*

> *What is your age?*

> *Do you drive?*

> *Have you ever been in an accident before?*

I am going to present you with your first scenario now.

[Task 1: User wants to report an accident]

[Scenario]: You were just in an accident and want to report the accident to your insurance company. The damage was minor and you are not injured so you're okay to use the app.

[Prompting Questions]

- 1: Where would you begin this task?
- 2: What do you expect to see when you press on ____?
- 3: [After pressing on the icon] Is this what you expected to see?
- 4: What is happening on this 'page'?
- 5: What does it look like can you do from this 'page'?

- 6: What do you think of this 'page'?

- 7: Is there anything that is missing from this 'page'?

- 8: What will you do next?

- Repeat questions 2-8.

[Post Task Questions]

- How easy was it to complete the task on a scale of 1-5, 1 being not easy and 5 being very easy?

- What made you give it a rating of __?

- How important would completing this task be to you on a scale of 1 - 5, 1 being not important at all and 5 being very important?

- What made you give it a rating of __?

[Task 2: User wants to check on the status of a claim using the desktop app]

[Scenario]: You were in an accident and want to follow up on the claim that you made to see what its status is.

[Prompting Questions]

- 1: Where would you begin this task?

- 2: What do you expect to see when you press on _____?

- 3: [After pressing on the icon] Is this what you expected to see?

- 4: What is happening on this 'page'?

- 5: What does it look like can you do from this 'page'?

- 6: What do you think of this 'page'?

- 7: Is there anything that is missing from this 'page'?

- 8: What will you do next?

- Repeat questions 2-8.

[Post Task Questions]

- How easy was it to complete the task on a scale of 1-5, 1 being not easy and 5 being very easy?

- What made you give it a rating of __?

- How important would completing this task be to you on a scale of 1 - 5, 1 being not important at all and 5 being very important?

- What made you give it a rating of __?

What we learned

Enhancements & User Feedback

● Navigational menu should be improved, make sure users know which step they are in, what's the previous step and the next step.
● Use other navigation method instead of "next" button. The "next" button is only another form of step guideline like AccidentAssist.
● The page of recording accident is not clear enough for some users, new users are confused about what they are expected to do (even though they can finish the task), either redesign the page or provide some guidelines should work.
● When inputting the other driver's information, it is ok to put all the necessary information in one page instead of three pages as long as users are clear what information is needed. Again, users don't like steps here because they probably tend to assume there will be much information waiting to input.
● The words in some buttons should be more clear indicating what users will do next, for example: the "save" button in the QR code page, the "finish" button in the involved driver page, etc.
● The history main page should be redesigned, indicating the newest accident recorded.
● In the history accidents, we can try to split the report information into several sections instead of putting all the information in one page.
● Since police and insurance agents are involved, we can add a function which allow users to chat with police and agents.