P7: Experience Evaluation Plan & Simple Evaluation

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Part I: Basic Evaluation Plan

Task 1 - Finding and contacting a friend using the map

Task scenario: It is 10 pm and you are looking to find a friend to walk with you to a restaurant. Contact a friend nearby to see if they are willing to walk with you.
Gauge for Completion: When the user navigates to the call or text screen.

Task 2 - Planning a trip

Task scenario: You are hungry and are trying to figure out the best way to get to your favorite restaurant. Use the route planning feature to find the best route.
Gauge for Completion: Navigate to the screen where it shows the projected route on the map with the steps and start button.

Task 3 - Contacting emergency services

Task scenario: You have finished studying and are walking home by yourself at night. You hear loud noises from a car and see two guys running away with a big bag. Make a quick emergency call using the app to notify authorities of the incident.
Gauge for Completion: Slide the emergency bar fully to the right.

Participant Profiles:
Participant 1: Our first user is a 19-year-old student studying Mechanical Engineering at the University of Washington. He is an Android user who lives in the dorms and spends a lot of time playing games and browsing Reddit on his phone.

Participant 2: The second user is also a 19-year-old student. He is a pre-engineering major at the University of Washington and lives in a dorm on campus. He owns an iPhone which he uses frequently to communicate with his friends on WhatsApp.

Participant 3: The third user is a 20-year-old student studying Interaction Design at the University of Washington. He lives in an apartment near campus. He is an iPhone user and spends a lot of time using social media apps.

Participant 4: The last user is a 19-year-old student studying Mathematics at the University of Washington and lives in a dorm on campus. He is an Apple fanatic and owns all of the newest Apple technology.

Part II: Simple Evaluation

Findings

Findings 1 — Map Symbols are Ambiguous
When our test participants first looked at the map after given Task 1, they were confused about what the symbols on the map represented. The pink dots on the map represent the location of friends, but our participants thought that they represented physical features on the map. Participants' suggestions for resolving this problem were to have friends' profile pictures on the map instead of the pink dots and include their names under each icon to reduce ambiguity (Participants 1, 3, 4). We agree with these suggestions and will implement changes to the appearance of friend locations.

Finding 2 — Multiple Opinions on how to Implement Emergency Button/Bar
Our findings revealed that participants have multiple opinions about how to implement the emergency call feature. Participant 3 suggested that we move the feature to the top to maximize space. Participant 1 thought that a severe emergency is unlikely to happen so it is unnecessary to include the feature on the main screen. Many of our users liked the idea of activating the feature with a sliding action. Considering this feedback, we decided to keep the feature as it is because although users may not use the feature often, we think that this option is crucial to elevate the user's sense of control over their safety. Furthermore, we kept the idea of activating the feature by sliding the bar to the right, instead of the proposed implementation of holding it for a certain time. This decision was made by considering the fact that users may have to make this decision quickly, in which case they would not be able to spend the extra few seconds holding down the button.

Finding 3 — Dissatisfaction with the Current State of the Emergency Feature
Our participants showed dissatisfaction with the limited number of options provided for emergency services. In the current design, users are only able to contact 911. A concern with this design is that there may be instances that are less severe and thus may not be appropriate to call 911. Participant 1 said that they want to see an option to notify friends nearby that the user is in a dangerous situation and Participant 4 provided multiple suggestions including the ability to store emergency contacts, activate recording devices to capture the situation, and share information with authorities.

Finding 4 — Route Description Icons were Unclear

Based on our findings, all of our participants revealed that the icons to describe the safety of a route were unclear and confusing as to what they were representing. The majority of our participants understood that the person icon represents how many people are on a route, but none of the participants knew what the other icons (light bulb and hazard sign) represented. Participants 1 and 4 suggested labeling the icons so that they are explicit about what they represent. Another issue that Participant 1 addressed was that the icons were too cluttered. With three different icons and five of each (with a total of 15 for each route), the interface is difficult to comprehend because there is too much detail. A possible solution is to only put one icon and a bar scale next to it. Since the icons are not crucial to the functionality of the navigation, I observed that Participant 4 did not even try to understand what the purpose of the icons are and just chose the fastest route. Therefore, if the icons are not intuitive, it is unlikely that the user will make an effort to utilize them.

Overall Strengths

One key aspect of the prototype that we found to be a strength according to user feedback is the pop-up that appears when clicking on a dot relating to a friend. Participant 1 appreciated the simplistic design of the pop-up, featuring only 3 aspects: the name of the contact, a button to send a message to the user, and a button to call the indicated user.

Participants of our study also expressed appreciation for the implementation of the emergency feature as a slider. They agreed that activating the call to emergency services through a sliding action is preferable to other methods because there is a low risk of accidentally activating the feature (for example, if the feature was implemented as a tap feature, the user may accidentally activate the feature by tapping the wrong section of the screen) while still allowing for a fast method of activation.

Lastly, participants found the implementation of the navigation features to be user-friendly because they were similar to existing navigation systems (e.g. Google Maps). To help our users choose the best route, we combine aspects including the time it takes to the destination and safety levels as determined by the amount of people, light, and warnings on the route. The process of entering a destination to choosing a route to follow was intuitive to follow for the participants.