MOONLIGHT

Shining a light on personal safety & assistance

Moonlight is a location based assistance application with the intention of solving the fundamental issues associated with receiving help from unknown parties and establishing trust. The basic application will allow users to request general assistance, reach out to find others to interact with socially, and receive help in emergency situations. By exploring the environment of "The Active Community", Moonlight hopes to gain further insight into the how people establish trust with one another via the means of representation and reputation within a digital system.

The initial idea of Moonlight was to promote a feeling of safety by better connecting people with a geographical proximity. The use case driving this application was the concept of someone wanting someone else to walk them to their car after a late lecture. The key target was an application that would allow people to feel safer.

AIMS

Our aims for the Moonlight app from the outset are to build trust with users, build trust between users and ultimately eradicate the issues that are described above. One of the main issues that were faced during development of the app was to ensure the safety of the usersan to create a system capable of not being exploited for malicious reasons.

A key element addressed with this application is how to establish a sense of knowing with others in your area. The app seeksv to create and nurture mutually beneficial relationships with these people, without prior establishment of trust.

RESEARCH

Research revealed components of trust were that the trustor be vulnerable to the trustee. That the trustor is optimistic the trustee is competent in some respect, and that the trustor is optimistic the trustee will have a motive for acting.

MOTIVATIONS BEHIND HELPING

It was also realized that a key motivation of using the application for many people would be for social connection. A helper may help someone in order to connect socially, as a helpee may request help for the same reason. Because of this, it was identified that the final condition of trust, that a trustee's motivation be in line with the trustor's expectation, may not be satisfied.

This caused a significant design change in two areas of the application. The first was the connections interface. The connections interface is a feature that allows helper and helpee to reconnect a later time, if they felt a connection.

SAFETY VS TRUST

The first of these caused a change in the direction of the design. Initially the application was meant to directly build trust, however, it was realized after research, and the information collected in initial interviews, that trust was not something that could be directly formed through an application without risk, and required that the helpee first accept some level of risk. Because of this we decided to shift the design in the direction of creating a safe environment, where trust could form naturally, note the distinction between safety and trust.

Trust is defined as (although a definition of trust is difficult) a firm reliance on the integrity, ability, or character of a person or thing whereas safety is defined as the condition of being safe; freedom from danger, risk, or injury. By ensuring people are physically safe, the natural formation of trust can be promoted through the application.

ESTABLISHING SECURITY & TRUST

By looking at current applications available within the safety and service space, we looked at how they have created a trusted and credible sense of wellbeing assurance. This asked the questions that what do people deem trustworthy and safe as well as how to best promote and enforce these highly valuable ideals.

If all users of the application could be uniquely identified, then any offence would be tied to them as a person, meaning they would not have anonymity. Research revealed this anonymity was a key cause of abuse. Research was then conducted to determine the best way to do this.

Once identity is positively established an objective rating system can be applied that ensures no abuse will go unpunished. Due to the nature of the application, and the dangers associated, it was decided that any abuse could not be forgiven, and would need to result in a permanent ban.

By implementing an Elo rating system into the back-end that is used to collect rating information during and after the interaction. The results of the rating are used to build a positive reputation within the application which assists in matching assistance and making appropriate matches for first time users.

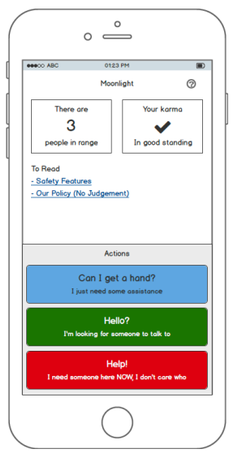
This resulted in the concept of a TrustMark. This is associated with each user, and is a sign that a user has not committed any offence, and has uploaded a government ID. This would be revoked if any abuse was committed.

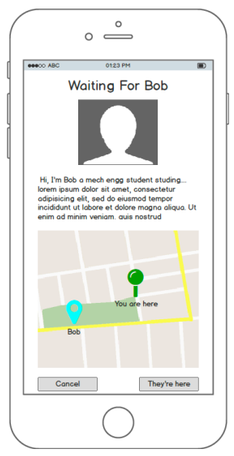
HOW IT WORKS

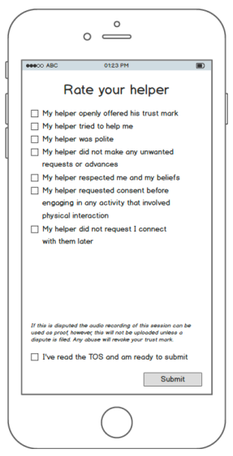
Moonlight works by connecting those who are need of help with those who are able to provide it. When a user feels unsafe they are able to request help through the Moonlight app.

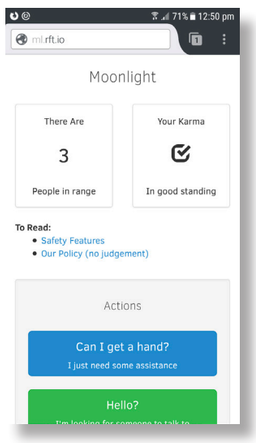
The app will alert all registered Helpers in the near vicinity that assistance is required. Helpers then respond if they are able to provide help, and a list of all available Helpers is sent to the Helpee to select from. Once a helper is selected, they receive the Helpees location and travel to their location. The Helper then assists the Helpee with their issue.

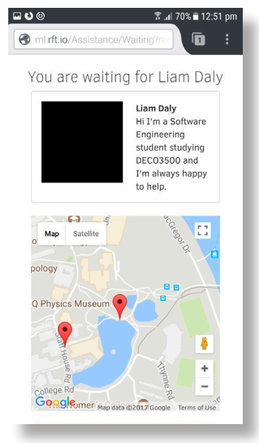
Once the issue is resolved the Helper leaves the area and the Helpee is given the opportunity to leave anonymous feedback on how the Helper performed.

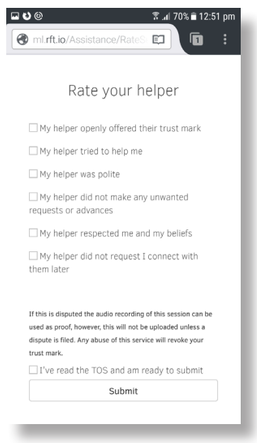












DEVELOPMENT

Initial interviews indicated strongly that developing an application such as Moonlight to facilitate trust would not be trivial. From interviews, it was clear that one of the only factors that would actually develop this trust was getting to know a person over a time period greater than the one expected during an app managed interaction.

By testing a prototype, so further ideas of how people consider the way they establish trust with some level of respect to the user's need at the time of usage. At this time, the scaling back of what we were testing and developing for prototyping was discussed as some user's felt overwhelmed while others required prompting.

A further high-fidelity prototype was development with a live web site to allow for testing through a mobile device. This testing was scaled down to allow for better quality test on targeted features within the application to ensure ease of use if stressful situations.

Along with testing, feedback, evaluation and iteration, research towards the understanding of trust and how people establish trust was conducted to give develop more perspective on other services that are available.

Demo Moonlight at ml.rft.io