

Prox - Rapid Information Propagation using Beacons



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M.S. - Human Computer Interaction
Capstone

Problem Space

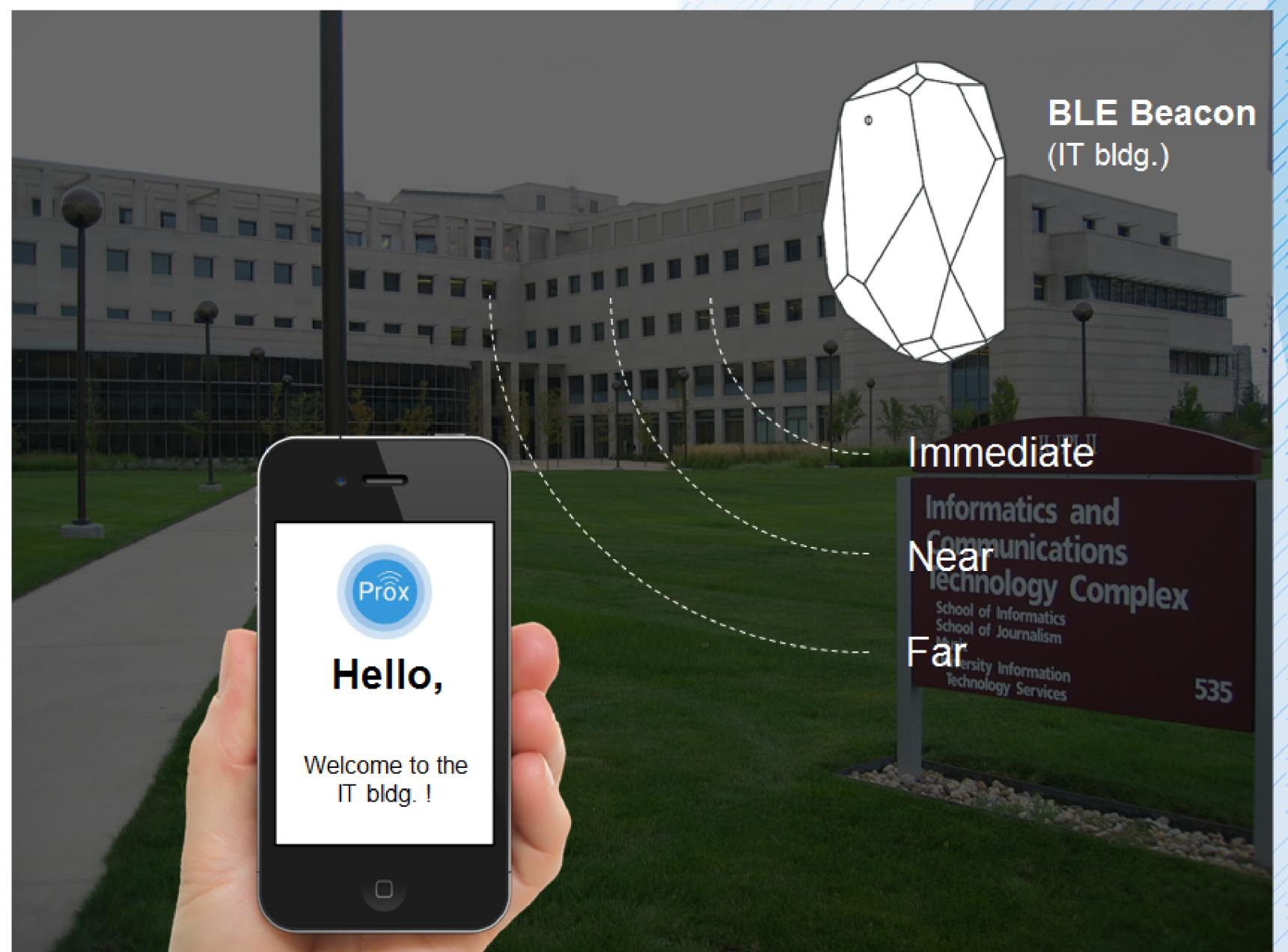
People miss out on information that may be relevant to them.

Current information such as events, job opportunities etc. is propagated using social media, email lists, flyers etc.

Delivery is often very late or in a manner that is easy to ignore. Most users only pay attention to or are limited to information relevant to their workplace/building/school etc.

From an HCI standpoint, I would like to explore the user experience behind:

- What information is available and how relevant it is?
- How did they receive the information?
- Whom would they like to share the information with?

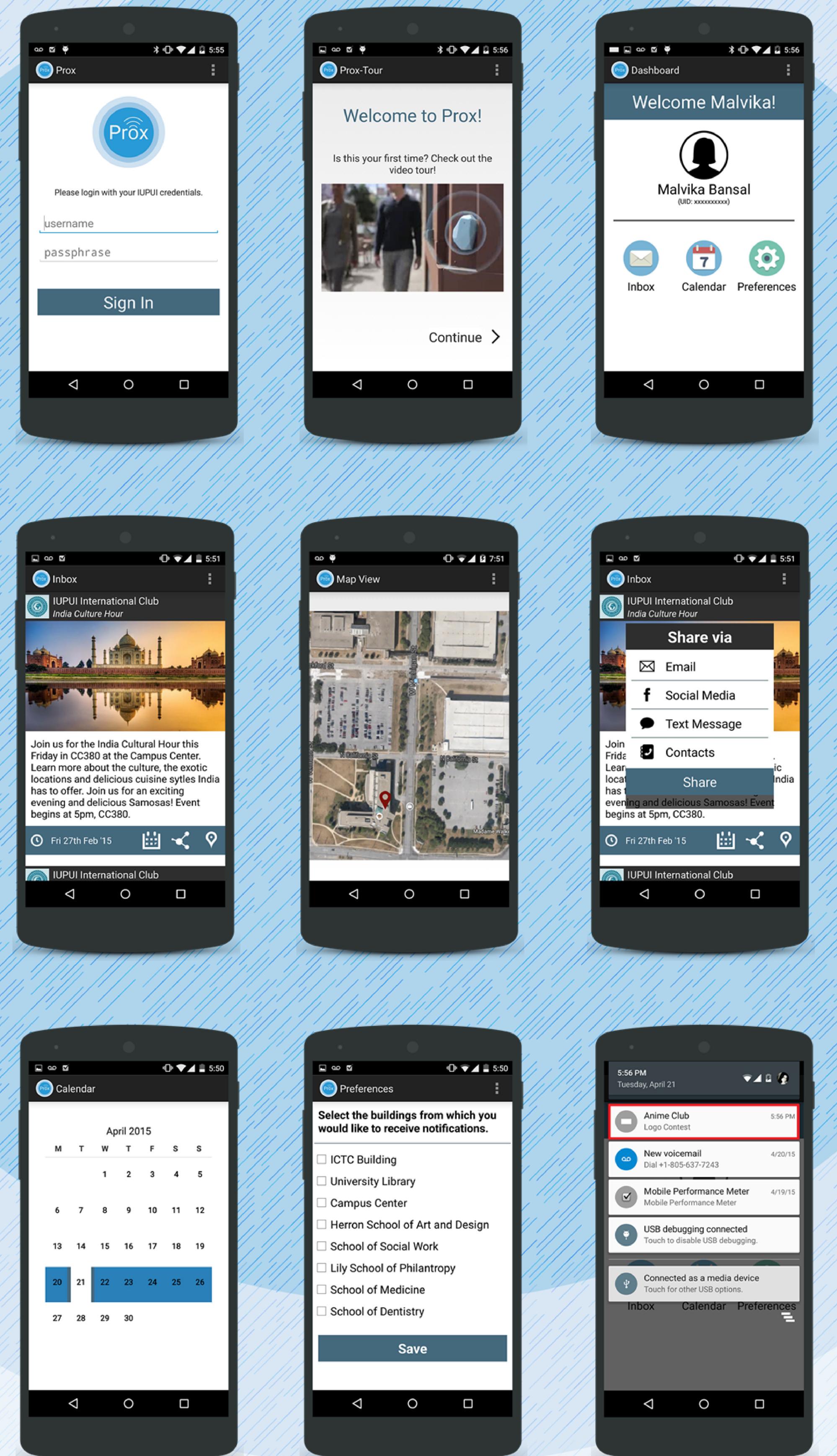


Product Development

Android mobile app developed using:

- Eclipse IDE
- Android SDK
- Estimote SDK

Customized version of Prox was installed as a native app on every participant's smartphone.



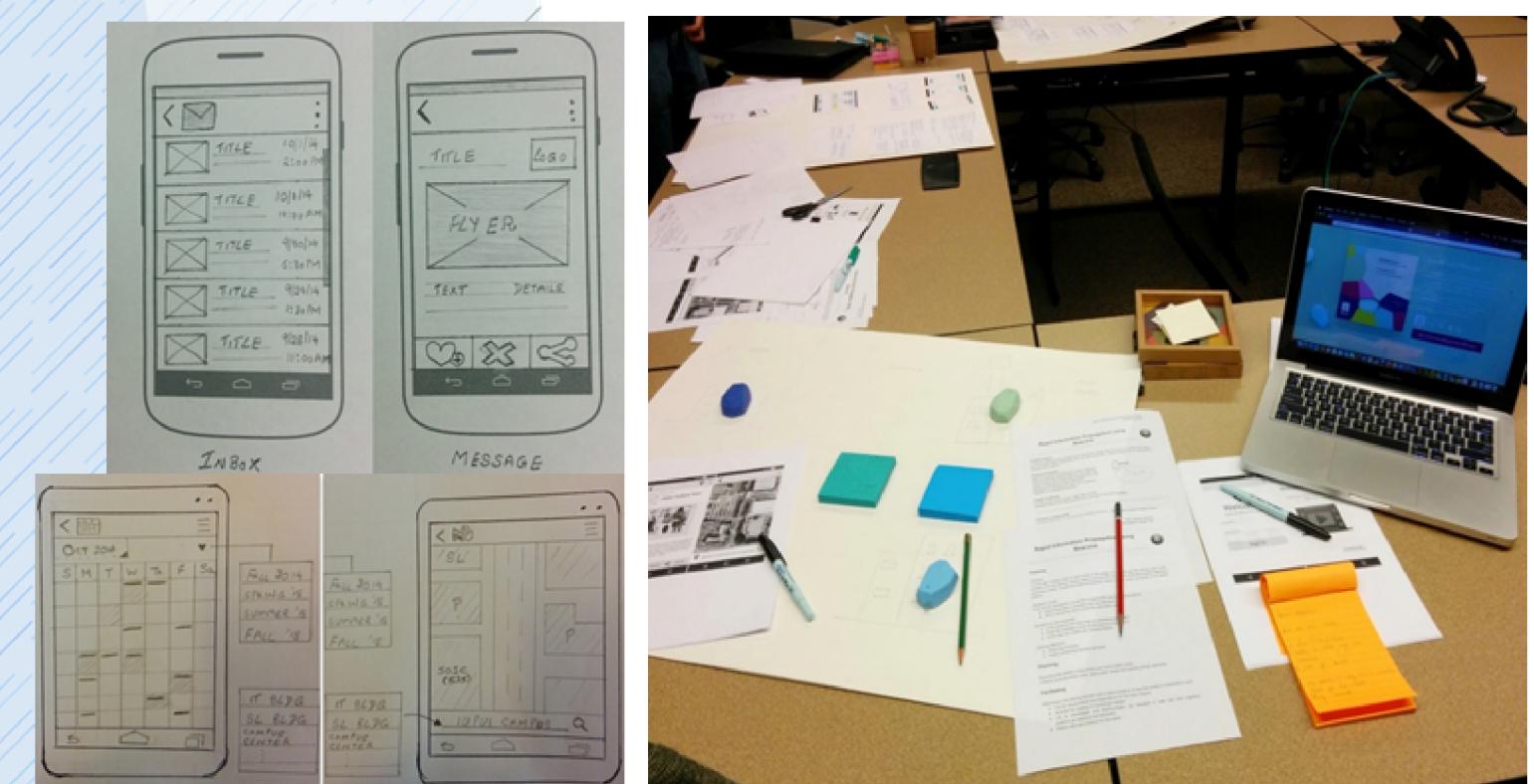
Design Ideation

Requirements Gathering

- Surveys
- Interviews
- Expert Advice

Iterative Feedback

- Cognitive Walkthroughs
- Preliminary UX Study
- Participatory Design



User Testing and Analysis

User Testing sessions involved:

- Briefing and Installation of Prox app
- Field Testing (conducted within a campus building via strategically placed beacons)
- Post Test – SUS, Semi-structured Interview

Analysis Summary:

- System Usability Score - **90** (Participants are more likely to recommend the product to a friend)
- The concept was found to be useful and informative.
- Participants commented that the UI is clean, minimalistic and intuitive.
- Notifications were not invasive.
- Participants felt aware and motivated to attend events after reading notifications.