



Ubiquitous and Mobile Computing

CS: 403X Give Me Some Space App

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Vision: A Study Space for All

- Allows students to find study spots
- Alleviates pressure on hot-spots
- Creates an even distribution across campus





Related Work

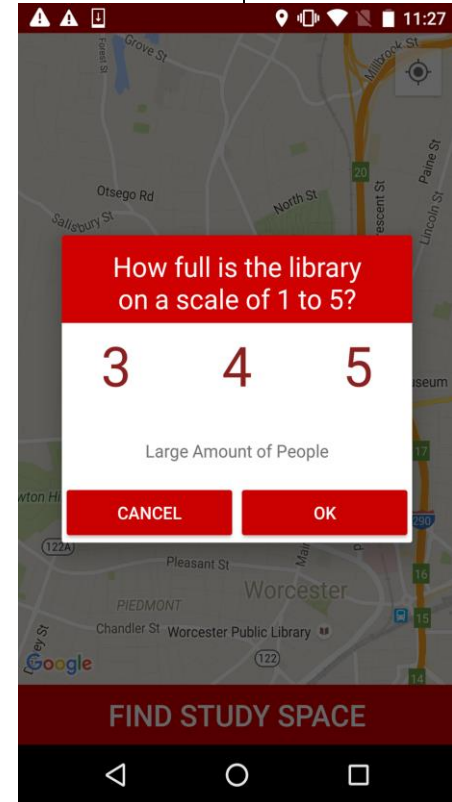
- SpaceScout (University of Washington) - allowed users to search for study spaces based on preference
- Room Finder (Bryant University) - displayed empty study spaces to students by tapping into the electrical system

Our User's process is easy



Visual Spec

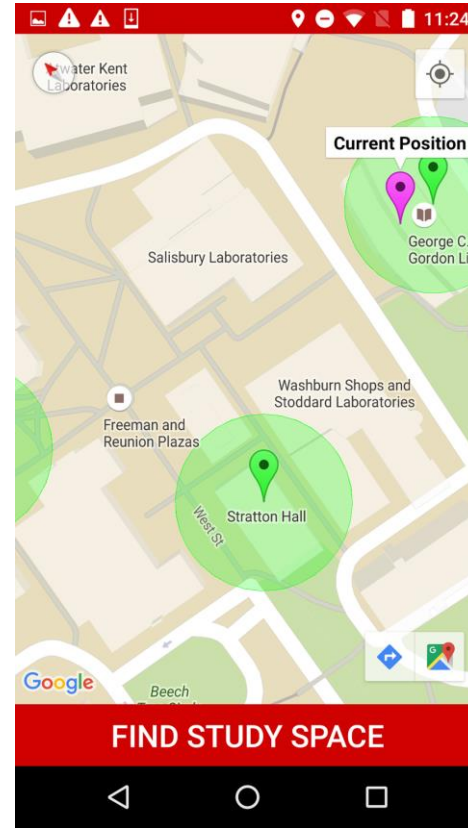
Sleek, easy, and
minimalistic



Implementation/Prototype



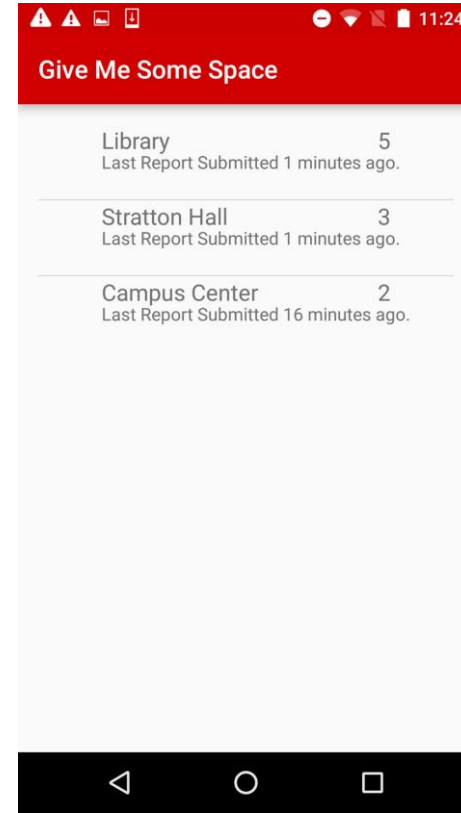
1. Initialize Google Maps
2. Wait for Geofence Event
3. Prompt user for Data



Implementation/Prototype Cont'd



1. Retrieve Data from Firebase
2. Search through Manifest
3. Compute Relevant Data





Evaluation/Results

- Five Participants
- Length of Study: 8 hours
- Accuracy of Averaged Ratings



Exit Meter Readings

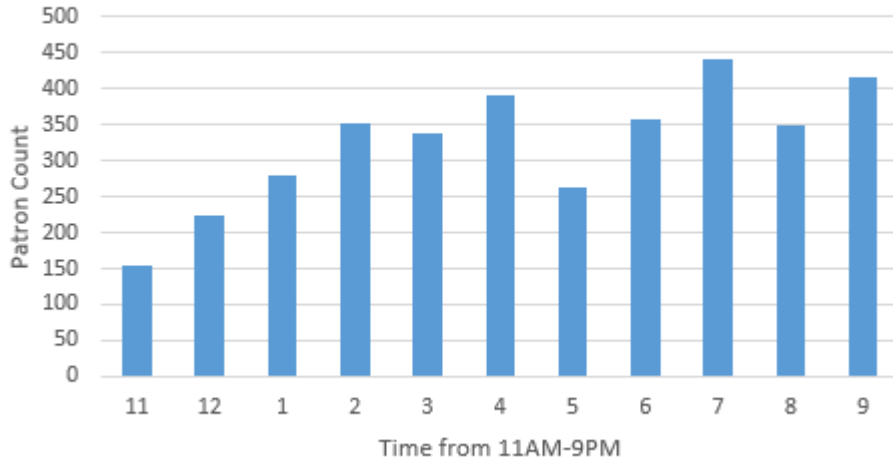


Table of User Study Ratings	
Time (EST)	Library Rating (1-5)
11:00 AM	3
12:00 PM	4
1:00 PM	4
2:00 PM	5
3:00 PM	5
4:00 PM	5
5:00 PM	4
6:00 PM	4
7:00 PM	5
8:00 PM	4
9:00 PM	4



Conclusion

- Utilization of crowd-sourcing and Geofences
- Accuracy of aggregated ratings: sufficient
- Saves students time



Future Work

- WPI Wifi Load Sensing
- Removal of Geofences
- Passive Data
- User Preferences



Thanks!

Any questions?

