Ubiquitous and Mobile Computing
CS 403x: EnergyUp

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Introduction

- Most cell phone run out of battery during the day
- Soofas in Boston, by an WPI alumni (solar-powered benches can charge your phone)
- Powermat
EnergyUp

- Charger and Power bank sharing platform
- Matching people with charger
- Streamline the process
A Charger Sharing Application
No more worries about your battery

- Geo-location charger finding
- Various charger type selection
- Automatic matching system based on location and availability
- Auto-update on map other’s location
- QR code scan ensure security
- Evaluating and Energy system
Implementation

- **Android Side:**
  - Camara and QR code
  - Storage Access Framework
  - Google Play Api
  - LocationManager
  - DownloadManager
  - GoogleAuthUtil

- **Server Side:**
User Test & Feedback

+ Positive Feedback:
  Friendly UI
  Easy to use

- Negative Feedback:
  Notification system
  Cannot show the people around
  Not enough people using it
Future work

- Better notification system
- Map path finding
- More detailed and secure user profile system
- Could be extended for sharing economy model
References

- Rudenko, Anna (16 August 2013). "The collaborative consumption on the rise: why shared economy is winning over the "capitalism of me"". Retrieved 10 July 2015.