CS 528 Mobile and Ubiquitous Computing App Ideas

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Some Interesting Location-Aware Apps
MileIQ

- **The Problem:** Mileage tracking is useful but a burden.
  - IRS deductions on taxes
  - Some companies reimburse employees for mileage,
- Passively, automatically tracks business mileage, IRS compliant
- Swipe right after drive to indicate it was a business trip
- Project idea? Implement some of this functionality

- **How Android modules? For what?**
- **What stats to decide if this is tackling important problem?**
Trigger

- Use geofences, NFC, bluetooth, WiFi connections, etc to set auto-behaviors
  - Battery low -> turn off bluetooth + auto sync
  - Silence phone every morning when you get to work
  - Turn off mobile data when you connect to your home WiFi
  - Silence phone and set alarm once I get into bed
  - Use geofence for automatic foursquare checkin
  - Launch maps when you connect to your car’s bluetooth network
- Project idea? Implement subset of these features

- What triggers would be useful for a WPI student?
Tidy

- Use picture meta-data to organize pics for you
  - Location taken
  - Time
  - Date
- What stats to decide if this is tackling important problem?
Google Keep App

- Remind user of task at certain
  - Time
  - Location
- Powered by Google Now

- How Android modules? For what?
- What stats to decide if this is tackling important problem?
NeverLate App

- Tells you when you have to leave Point A to get to Point B on time
- Factors in travel time, traffic, etc
- Sends notifications

- Not available in US

- What Android modules? For what?
- What stats to decide if this is tackling important problem?
iExit Interstate Exit Guide

- Hungry while driving? Need to Pee?
- Tells you which restaurants, points of interest are available off each exit on the highway
- Not available in the US
- **What Android modules? For what?**
- **What stats to decide if this is tackling important problem?**
Lookout Security and AntiVirus

- Phone lost? Use Google GPS function to pinpoint phone location on map
- **What stats to decide if this is tackling important problem?**
Layar

- Augmented Reality Browser
- Overlay information of location over real world
  - Information on restaurant you are at
  - Nearby apartments for rent
  - Tweets by people nearby

- **What layars would be useful for WPI students?**
Moves App

- Auto-track
  - Total time spent on various activities taken through the day
  - Timeline of activities, places visited, time spent

- Project idea? Implement subset of functionality?

- How Android modules? For what?
- What vertical specific user types would find this app useful?
References

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- Head First Android
- Android Nerd Ranch, 2nd edition
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- CS 65/165 slides, Dartmouth College, Spring 2014
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