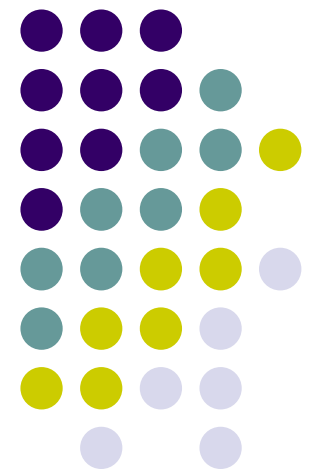
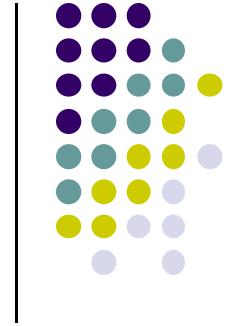


CS 528 Mobile and Ubiquitous Computing App Ideas

Emmanuel Agu



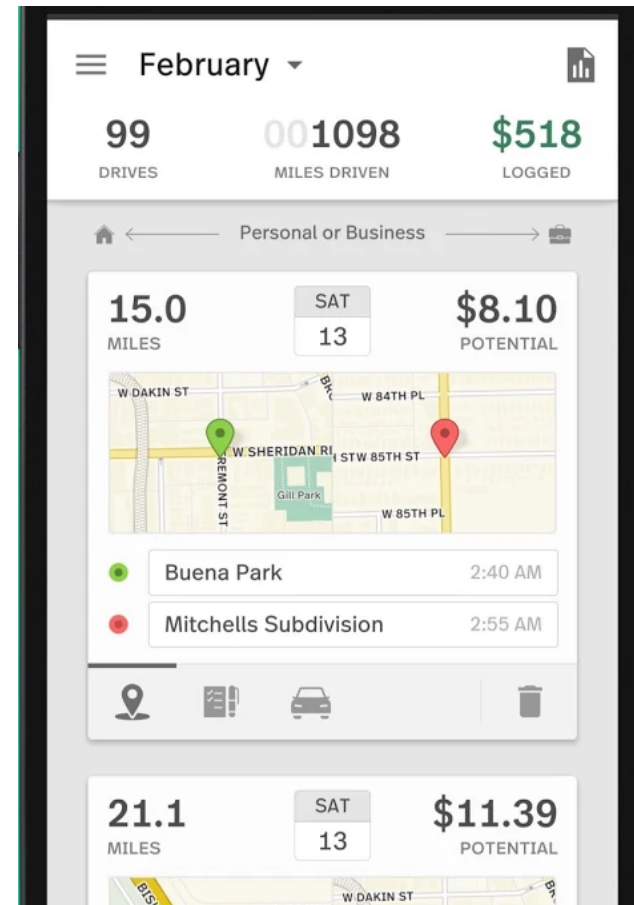


Some Interesting Location-Aware Apps



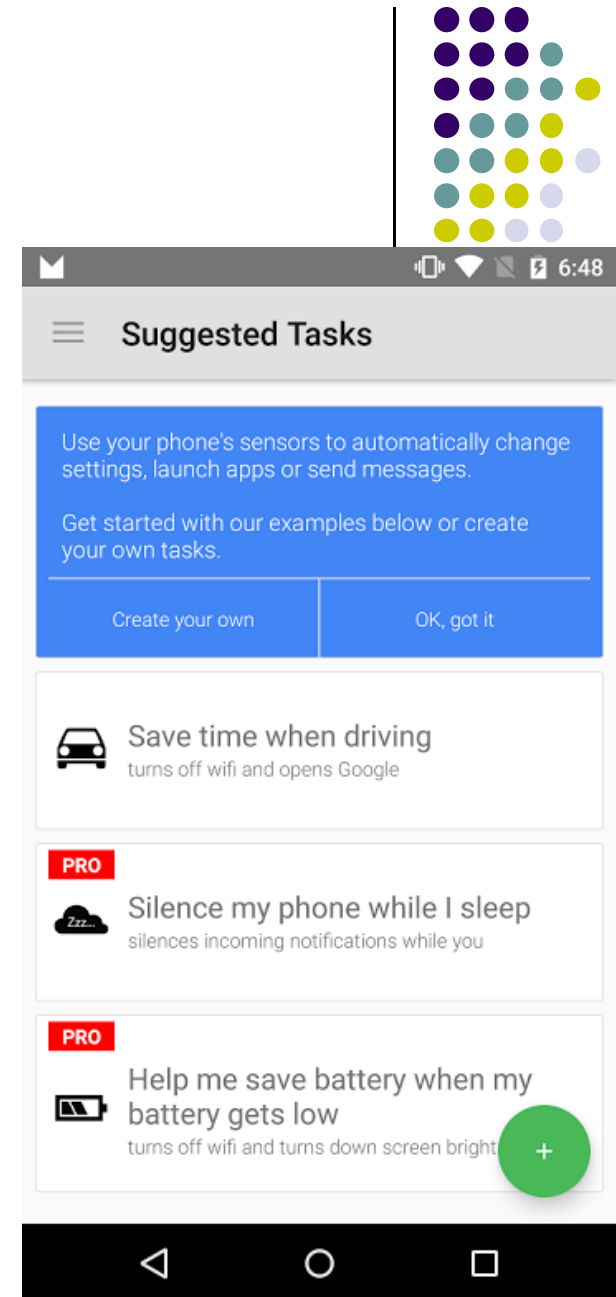
MileIQ

- **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?**



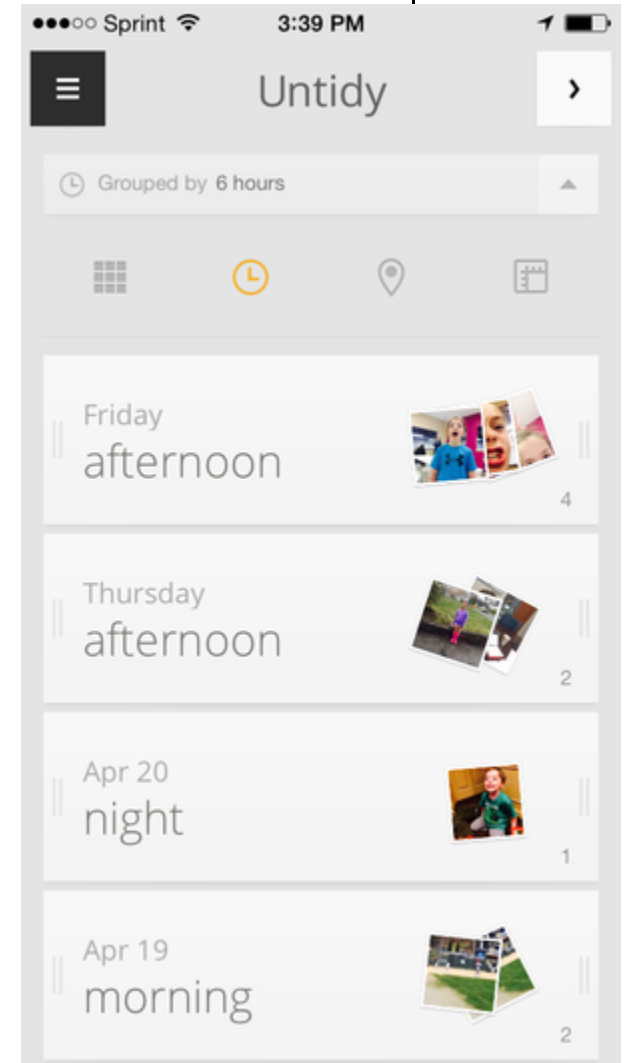
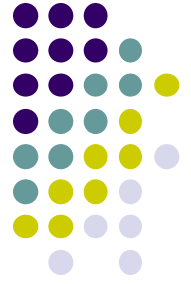
Trigger

- 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

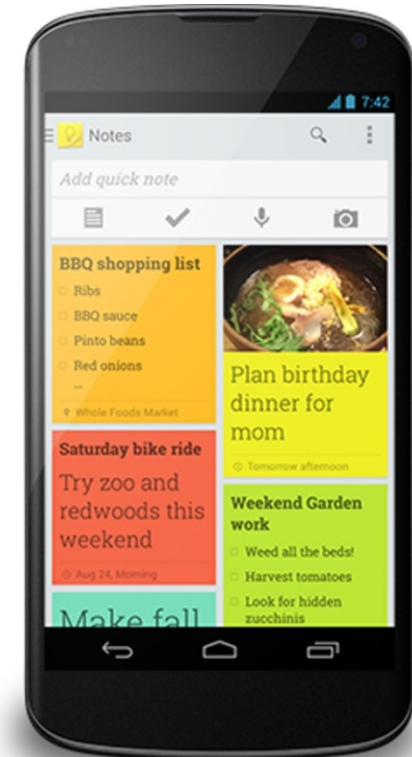
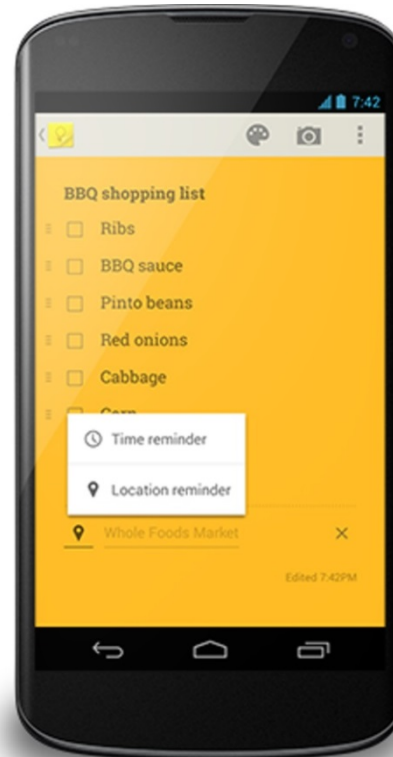
- Use picture meta-data to organize pics for you
 - Location taken
 - Time
 - Date
- **What stats to decide if this is tackling important problem?**



Google Keep App



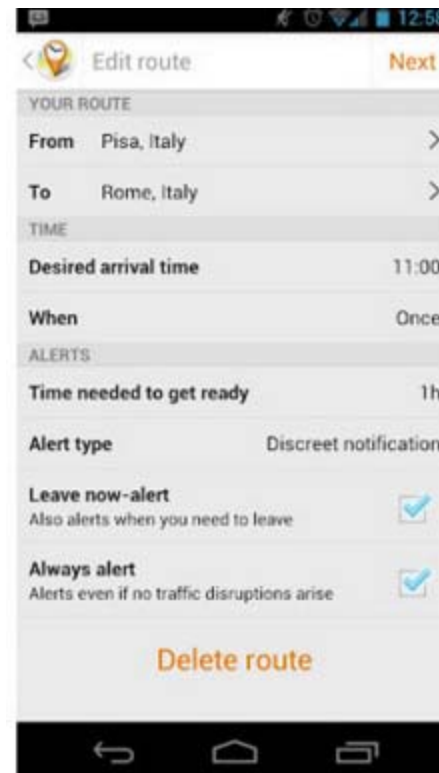
- Remind user of task at certain
 - Time
 - Location
- Powered by Google Now
- **How Android modules?**
- **For what?**
- **What stats to decide if this is tackling important problem?**



NeverLate App



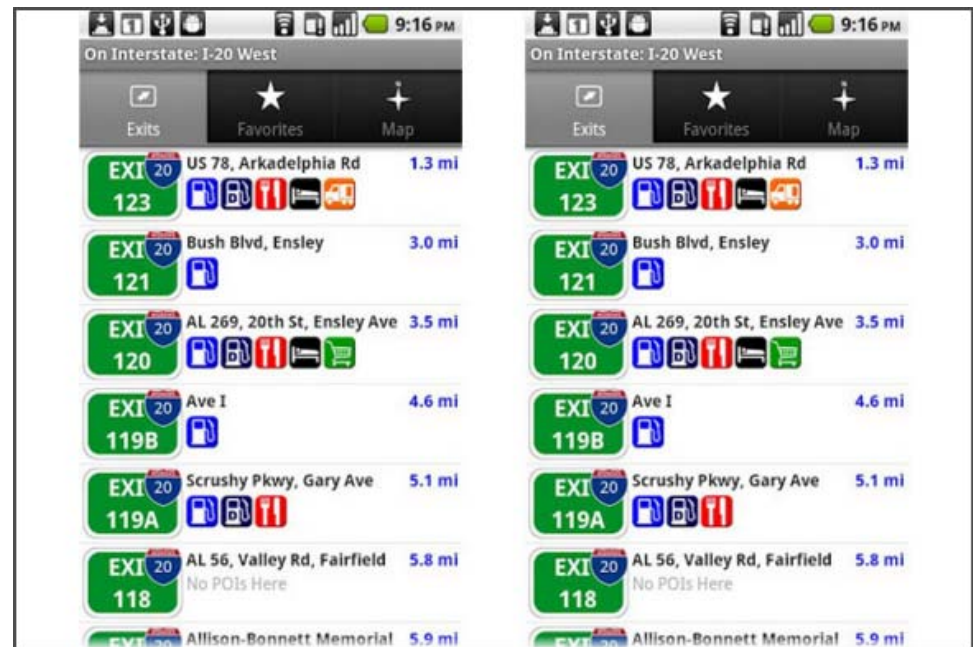
- Tells you when you have to leave Point A to get to Point B on time
- Factors in travel time, traffic, etc
- Sends notifications
- Not available in US
- **What Android modules? For what?**
- **What stats to decide if this is tackling important problem?**





iExit Interstate Exit Guide

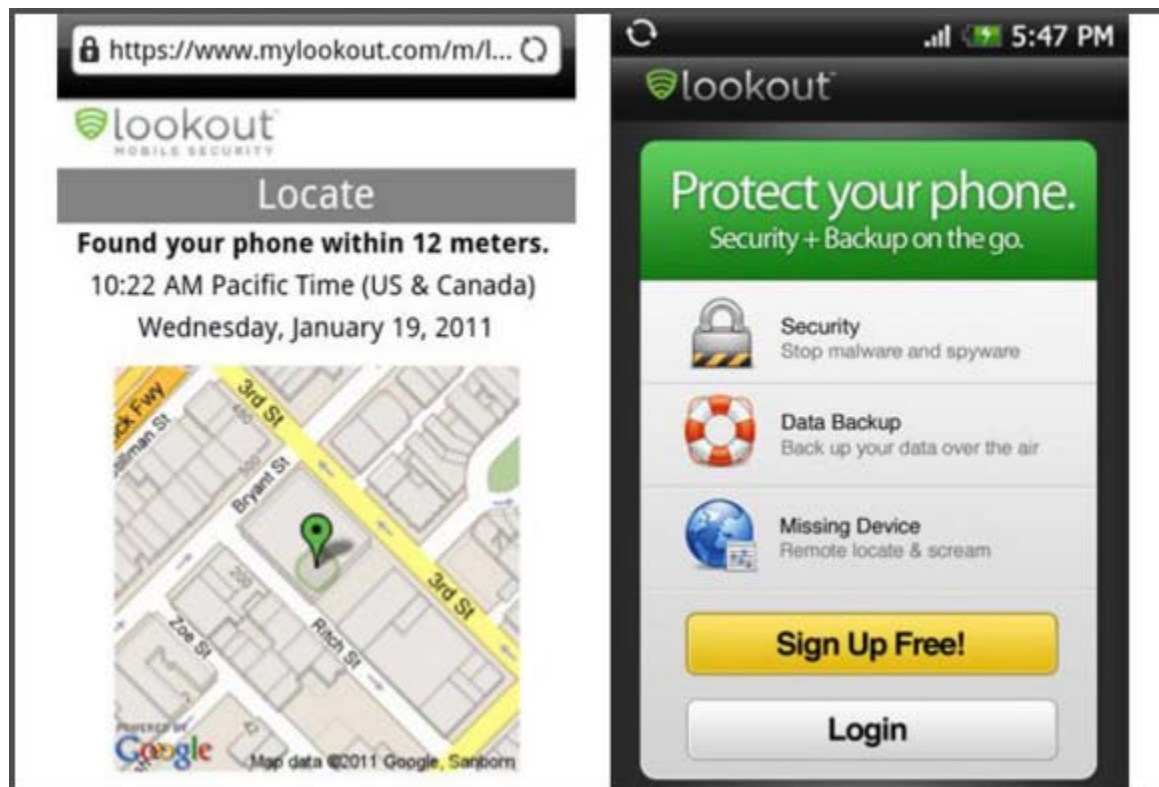
- Hungry while driving? Need to Pee?
- Tells you which restaurants, points of interest are available off each exit on the highway
- Not available in the US
- **What Android modules? For what?**
- **What stats to decide if this is tackling important problem?**





Lookout Security and AntiVirus

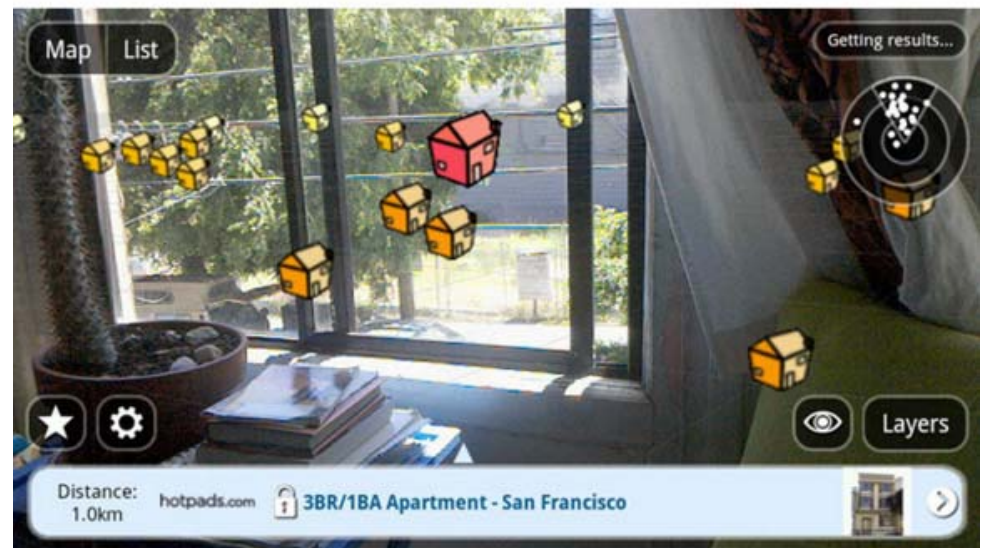
- Phone lost? Use Google GPS function to pinpoint phone location on map
- **What stats to decide if this is tackling important problem?**





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 layers 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

- John Corpuz, 10 Best Location Aware Apps
- Liane Cassavoy, 21 Awesome GPS and Location-Aware Apps for Android,
- Head First Android
- Android Nerd Ranch, 2nd edition
- Busy Coder's guide to Android version 6.3
- CS 65/165 slides, Dartmouth College, Spring 2014
- CS 371M slides, U of Texas Austin, Spring 2014