
ECE 1778: Creative Applications for Mobile Devices



Lecture 5
February 8th, 2011

(1)



Today

1. Logistics
2. Assignments
3. Discussion of Proposals



Logistics

(3)



Project Plan Due Today

- Questions, issues?
- Should have submitted on blackboard, as per my announcement
 - Everyone should now be receiving email notification of announcements?
- This plan was required to get you thinking about what you will need to do for the project.

Project Timeline

1. Forming Groups
 - Should be done; still some stragglers
2. One-Page Proposal
 - Today; Must receive approval to proceed
3. Design Plan
 - Due Today
4. **Plan Presentations**
 - Beginning next week! Based on submitted document;
5. **Final Presentations**
 - Weeks of April 5 & 12 - REVISED
6. **Final Report Due April 12th - REVISED**

**Begin
Execution of
Project Now!**



Plan Presentations, Starting Next Week

1. Reprise Goal, make more precise
2. Rough design of what the user sees
 - Mock-ups of screens
 - <https://gomockingbird.com/mockinbird/>
 - Any drawing package will do
3. Block Diagrams of Code
 - Top down
 - With short prose description of each
 - Should be linked to the screens



Plan, continued

4. Statement of Risks/Issues

- What roadblocks/issues/challenges do you foresee?
- App-wise, programming-wise, hardware-wise, ethics-wise

5. What do you need to learn that you don't know

- all members

6. For Groups with Appers

- Separate Discussion on how Apper contributes to project.

Phones



Have Acquired 15 Phones

- LG Optimus 1 P 500
 - From Telus
 - Locked, unfortunately.
- Display 320 x 480 pixels, 3.2 inches
- Android 2.2 Installed
- 3-axis accelerometer
- See:
 - [http://www.gsmarena.com/
lg_optimus_one_p500-3516.php](http://www.gsmarena.com/lg_optimus_one_p500-3516.php)
- \$226 all in



Phone Assignment – To Groups

- Needed for the next assignments and project
- Will provide one phone per group that does not already have a device
 - There are 10 such groups by my count
 - You will arrange to share this phone amongst yourselves



In Addition: 5 Phones for Sign Out

- There will be 5 other phones available for signout on a daily basis
 - Can only book for 1/2 day at a time (too fine granularity?)
 - Book via Google Doc reservation sheet
 - see announcement that went out today for link to sheet

- Pick-up and return to Braiden Brousseau, course TA
 - D.L. Pratt Building, Room 392
 - Times – as indicated on reservation sheet



You Will be Responsible for Phone

- You will be responsible for lost/broken phones.
- The phones cost \$226.

- Planning to teach a course, like this one, in Ethiopia in May, at Addis Ababa University
 - wish to take these phones with me to use there
 - would like them to survive intact



Handing out of Group Phones

- Work from Group List
 - Signup sheet – name, serial number, signature



Assignments Out Today

(14)



Assignment P3

- **Location, Motion Sensors and Image Capture**
- Learning how
 - to determine out where the phone is, geographically (GPS)
 - how it is moving (accelerometer)
 - how to use the camera to capture images
- Read the relevant parts of Murphy (Android) or Mark (iPhone)

Assignment P3

- In response to being shaken,
 - phone takes a picture 1 second after the shaking stops, and
 - records the GPS location at the same time.
- Each location should be stored in a growing list;
 - when the user views the list item, your application should display the picture taken at that location.
 - The list should be maintained over separate invocations of the app, and it should be possible to delete a list item, which would remove the corresponding image in the file system.
- Due next week, February 15th, 9am

Assignment A3

- Do “Droid Where is My Car” Tutorial
 - an app that shows how to remember where you put your car.
 - <http://appinventor.googlelabs.com/learn/tutorials/whereismycar/whereismycar.html>
- If you need help – email TA Prachi Singhal
 - prachi.singhal@utoronto.ca

Assignment A3 - Appers

- Design your own app that keeps track of the last 10 places you've been.
 - Each place should be stored in a database, as in the Droid tutorial,
 - When requested, location displayed on a Google map
-
- Due next week, February 15th, 9am



Programming Issues



Posts and Handlers



Proposal Discussions, Continued



Project Proposal Discussions

- 8 Projects remaining, of 20
- Title – I think a title/name is important
- What
- Why
- How

