ECE 1778 – Creative Applications for Mobile Devices
January 2011
Programming Assignment #P2, for Programmers

Containers, Select, Lists and Files

The goal of this assignment is to learn more of the basics of Android capabilities, beginning with basic layouts of what a user sees, and then selects, how to present lists and how to store files.

1   Reading/Practice

Read and do the exercises in Chapter 10, 11, 12 and 24 of the **The Busy Coder's Guide to Android Development**, Version 3.4, doing the small coding exercises given there.

If you are developing on the iPhone, then the suggested book, **Beginning iPhone 4 Development Exploring the iOS SDK** (now linked to on the course website) by Mark, Nutting and LaMarche, covers similar territory in Chapters 4, 8, and 12.

2   Assignment

Write an Android application that allows the user to create a list of people along with their age and favourite sport, and allows the storage and loading of those lists in multiple files on the device. The app should work as follows:
- The starting screen should have five buttons: EnterNames, View, Store, Load and Exit
- Pressing EnterNames takes the user to a new screen where they can enter a series of records describing people: their name, age, and favourite sport. The selection of the favourite sport should be from a drop down list, not free-form text. The user should be able to enter as many names as desired from this screen, and return to the starting screen through a 'Done' button.
- The Store button causes the list to be written out to a file on the device using a file name provided by the user.
- The Load button should allow the user to read in a previously stored file.
- The View button displays, in a scrollable list, the set of people entered, along with their age and favourite sport.
- The Exit button terminates the application, but makes sure any that any list that has been created or modified, will be stored first.

Due date: February 1st, before start of class.

What to submit. **NEW: Please submit your work on the Blackboard Course Portal. Be sure to submit it to the 'P2' Assignment.**

1. Android developers: a zip file containing your complete project, runable from Eclipse; use your student number as the filename. Also submit the complete source directory in a separate zip file.
2. iPhone developers: you must submit the complete project directory, including source, in a zip file. Use your student number as the filename. Please do you development on the 4.2 version of the SDK, and make sure that you haven't included any files by reference. In fact, please test your submitted zip file before sending it in.