

**ECE 1778 – Creative Applications for Mobile Devices**  
**January 2013**  
**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 tutorials from pages 131 to 200 and 387-406 **The Busy Coder's Guide to Android Development**, Version 4.4, doing the small coding exercises given there.

If you are developing on the iPhone, then the suggested book, **Beginning iPhone 6 Development Exploring the iOS SDK** by Mark, Nutting, LaMarche and Olsson, covers similar territory in Chapter 4: “More User Interface Fun”, Chapter 8: “Introduction to Table Views” and Chapter 13: “Basic Data Persistence.”

### **2 Assignment**

*NOTE: before starting this assignment, please go back and read ‘Braiden Brousseau’s Guide To Quality Apps’ that was part of Assignment P1. Your assignment should obey those guidelines, as part of the grade will be assigned for fulfilling those requirements.*

Write an app that allows the user to create a list of people along with their age and favourite games, 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 should take the user to a new screen where they can enter a series of records describing people: their name, age, and favourite game. The selection of the favourite game 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 should cause 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 by showing a list of all the previously stored files. (This takes some extra work).
- The View button displays, in a scrollable list, the set of people entered, along with their age and favourite game.
- 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:** Tuesday January 29th, at 6pm, Marked out of 10, 0.5 marks off every hour late.

What to submit. **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, runnable 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 your development on the 4.5.2 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.