

ECE 1778 – Creative Applications for Mobile Devices
January 2012
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, 13 and 30 of the **The Busy Coder's Guide to Android Development**, Version 3.7, doing the small coding exercises given there.

If you are developing on the iPhone, then the suggested book, **Beginning iPhone 5 Development Exploring the iOS SDK** (now linked to on the course website) by Mark, Nutting and LaMarche, covers similar territory in Chapter 4: “More User Interface Fun”, Chapter 8: “Introduction to Table Views” and Chapter 13: “Basic Data Persistence.”

2 Assignment

Write an app that allows the user to create a list of people along with their age and favourite food, 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 food. The selection of the favourite food 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 food.
- 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: Monday January 30th, 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 4.2 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.