

Semester Project – ITDEV-181

This project is intended to bring together all the skills and techniques you have been learning in class into one large project. Use this project to not only help you review and apply class material, but also to add to your portfolio that you can show to prospective hiring managers when you seek employment in the field.

Project Requirements

Create an Android app meeting the minimum requirements shown below. You can choose to do any type of app as long as it meets the requirements and is rated “G” or “PG”. You should test the app on an emulator to make sure it looks good and runs properly on that emulator. It is not necessary to design for multiple screen sizes or do exhaustive testing on multiple devices. You may use Android Studio or Eclipse. Use descriptive variable names, proper indentation, and comment your code. The app should have at least three activities and meet at least six of the following minimum requirements:

- 1) Use persistent storage to save data between program runs Use SharedPreferences or MySQL.
- 2) Have at least one animation.
- 3) Play audio or video.
- 4) Use a toast message.
- 5) Display a list of items that the user can choose from.
- 6) Use three of the following
 - a. Radio button
 - b. TextView
 - c. Check Box
 - d. WebView
 - e. Date Picker
 - f. Time Picker
- 7) Use at least two different types of layouts in your activities. Choose from RelativeLayout, LinearLayout, TableLayout, GridLayout.
- 8) Do some kind of calculation based on user input and display a result.
- 9) Display a splash screen (in addition to the three required activities).
- 10) Use a master / detail flow activity.

Project Deliverables

This project has two phases and therefore two due dates:

1. Design Phase – **Due May 1, 2015.** In this phase, you decide the topic of your project, plan how you will incorporate all the requirements, and sketch all the screens. Deliverable for this phase is a document including screen sketches (do not have to be fancy, just legible) and a few paragraphs about the function

of your app, how you will meet the project requirements, and whether you plan to publish the app or use it in your portfolio when it is complete. Turn in an electronic document on Blackboard. Instructor will provide feedback within 7 days that you may use to improve the second phase of the project. (25%)

2. Implementation Phase – **Due the last day of class, May 19, 2015.** In this phase, you build the app you designed in the design phase. Zip the entire project, screen shots, and report (detailed below) into one zip file, and submit that file on the class Blackboard site. If you do an oral report, please submit the Powerpoint or other materials you used in your oral report. (75%).

Project Report Two options are available. Choose either (a) or (b), and let your instructor know which you are choosing.

- a. Written Report – A separate report that contains
 - i. Instructions about how to use the program.
 - ii. An overview of the technologies used, how they work, and why you chose them.
 - iii. Documentation of how you met all the project requirements. Please list the six options you chose to implement of the ten available.
 - iv. The emulator you used for testing.
 - v. Lessons you learned.
 - vi. If you plan to include the project in your personal portfolio to use when interviewing for a job, or use the project in another way.
- b. Oral Report – A 5 to 10-minute presentation to the class during the last class period. Demonstrate your program, the source code, and be sure to include all the information required for the written report in part (a). You may use the whiteboard and overhead projector.

Grading

You can find the rubrics for both phases of the project on Blackboard.