

ITIS/ITCS 4180/5180 Mobile Application Development
In Class Assignment 2

Basic Instructions:

1. In every file submitted you **MUST** place the following comments:
 - a. Assignment #.
 - b. File Name.
 - c. Full name of all students in your group.
2. Each group should submit only one assignment. Only the group leader is supposed to submit the assignment on behalf of all the other group members.
3. Please download the support files provided with this assignment and use them when implementing your project.
4. Export your Android project as follows:
 - a. From eclipse, choose "*Export...*" from the File menu.
 - b. From the Export window, choose *General* then *File System*. Click *Next*.
 - c. Make sure that your Android project for this assignment is selected. Make sure that all of its subfolders are also selected.
 - d. Choose the location you want to save the exported project directory to. For example, your *Desktop* or *Documents* folder.
 - e. When exporting make sure you select *Create directory structure for files*.
 - f. Click Finish, and then go to the directory you exported the project to. Make sure the exported directory contains all necessary files, such as the .java and resource files.
5. Submission details:
 - a. When you submit the assignment, compress your exported Android project into a single zip file. The format of compressed file name is InClassAssignment#.zip
 - b. You should submit the assignment through Moodle: Submit the zip file.
- 6. Failure to follow the above instructions will result in point deductions.**

In Class Assignment 2 (100 Points)

In this assignment you will build a simple Android application that will introduce you to RadioButtons, Intents and WebViews.

Notes:

1. The recommended Android Virtual Device (AVD) should have minimum SDK version set to 11 and target SDK at least 17. The app should display correctly on 3.2" QVGA (ADP2) (320x480: mdpi).

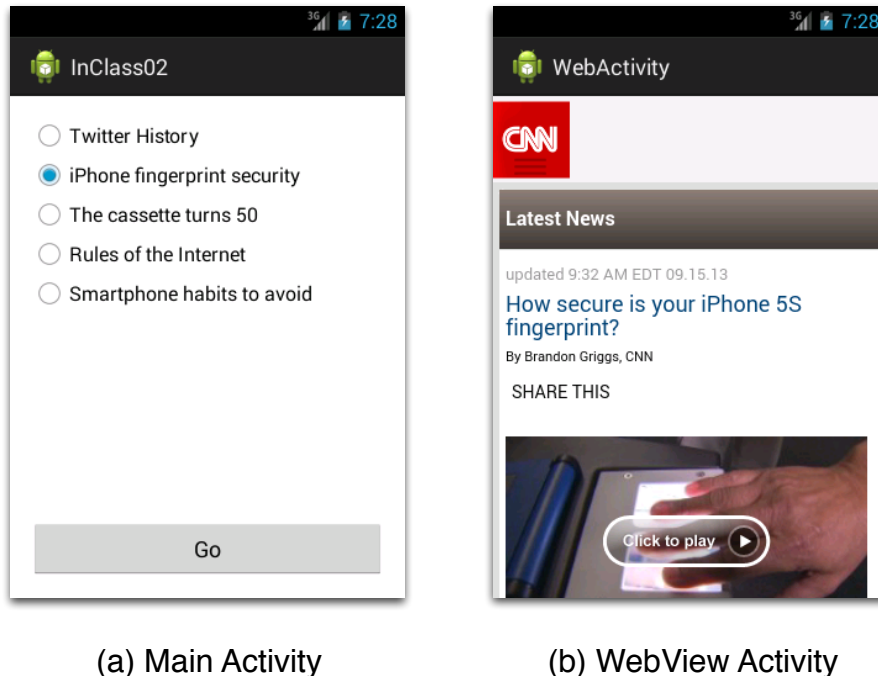


Figure 1, Application User Interface

Part 1 (50 Points): Using Buttons

The interface should be created to match the user interface (UI) presented in Figure 1. You will be using layout files, and strings.xml to create the user interface. The layout XML file can be modified through the raw xml, or through the GUI tools provided within eclipse. To build the UI, please follow the following tasks:

1. Create a new android project called "In Class 2".
2. You are provided with a Data class that contains a NEWS ArrayList that holds News objects. Each News object contains a String title and a String url.
3. Use a RadioGroup containing RadioButtons to enable the user to pick from the news items. A RadioButton should be displayed for each News item and the News title should be displayed as the RadioButton text.
4. Upon tapping the "Go" button, the WebView activity should be started. The URL of the selected news item should be added to the Intent extras. Hint: to find the selected RadioButton in a RadioGroup, you should use the RadioGroup's method `getCheckedRadioButtonId()`.

Part 2 (50 Points): The WebView Activity

This activity should receive the news URL from the Main Activity. The activity should display the news URL in an embedded WebView as indicated in Figure 1(b). The implementation requirements include:

1. The WebView activity should receive the URL from the Main activity.
2. The news URL should be displayed in the WebView, which is a simple component that is able to display a webpage in the hosting activity.
 - a. Information about WebViews can be found at <http://developer.android.com/reference/android/webkit/WebView.html>
3. You should enable JavaScript in the implemented WebView.
4. By default the WebView component does not support URL redirects. You should create a WebViewClient subclass to intercept the URL loading (via `shouldOverrideUrlLoading()`). This would ensure that the redirects are supported by the WebView and are not forwarded to the system web browser. For more information check:
 - a. The WebView Reference: <http://developer.android.com/reference/android/webkit/WebView.html>
 - b. `shouldOverrideUrlLoading()` method: [http://developer.android.com/reference/android/webkit/WebViewClient.html#shouldOverrideUrlLoading\(android.webkit.WebView,java.lang.String\)](http://developer.android.com/reference/android/webkit/WebViewClient.html#shouldOverrideUrlLoading(android.webkit.WebView,java.lang.String))