ITIS/ITCS 4180/5180 Mobile Application Development
In Class Assignment 4

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.**

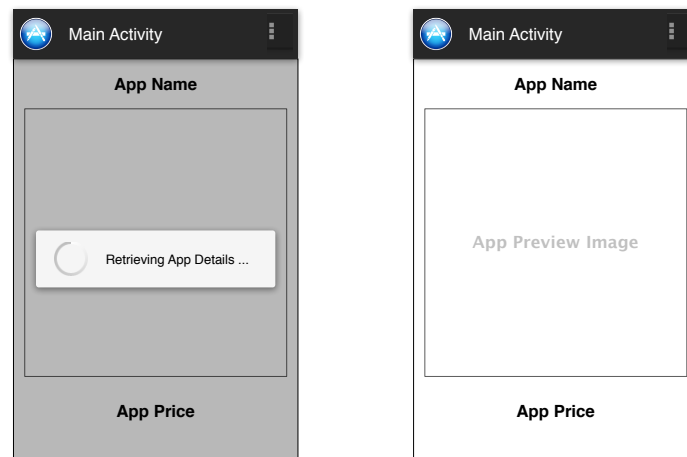# In Class Assignment 4 (100 Points)

In this assignment you will make simple HTTP requests and will parse the iTunes RSS feed data. The Apple iTunes store provides a RSS feed for its different provided media types. In this assignment you will focus the iOS Apps RSS feed. The app is composed of a single activity, namely **MainActivity**.

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).

API Description
- The API used in this assignment is the iTunes RSS API. The api used for this assignment should retrieve 50 top paid applications provided by the iTunes store.
    - XML api: http://itunes.apple.com/us/rss/toppaidapplications/limit=50/xml
    - JSON api: http://itunes.apple.com/us/rss/toppaidapplications/limit=50/json

(a) MainActivity Loading API   (b) MainActivity Displaying Info

Figure 1, Application User Interface

Part 1 (100 Points): MainActivity
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 **MainActivity** is responsible for the loading the top paid apps provided by the iTunes store using either XML or JSON api. The MainActivity should display the information for the most expensive application. The implementation requirements include:
1. Use an AsyncTask to communicate with the iTunes api and to parse the generate result. Do not use the main threads to download the api results. The parsing should take into consideration the XML namespace.
2. A non-cancelable ProgressDialog should be used during the downloading and parsing of the API information to indicate that the data is being retrieved.
3. From the retrieved apps' information, the Main Activity should display the information for only the most expensive app. The information displayed should include the app name, price, and image. Make sure to use an AsyncTask to retrieve the photo of the displayed application.