The objective of the first assignment is to get you accustomed to the iOS development environment and use some of the basic features of Objective C to build a simple app. You will learn how to use the Storyboard, understand the View Controller and View, use Google Youtube library in your xcode project and get a hang of Callbacks in Objective C. You will also learn how to build and populate a list, a feature that is commonly present in a lot of apps in the store.

For this assignment, you will use the Youtube Data API to fetch a playlist of popular videos of a channel (of your choice) and display it in the UITableView. Each UITableCellView should contain the thumbnail of the video and the video title. For those of you who would like to deploy the app on an actual device, you could implement a Detail View Controller, so that upon clicking a video in a cell, it should open and play the video in the in-built player. This part of the assignment is optional as the simulator does not have an in-built player. The app should be named 'Mini Playlist' and the Master View should have the title ' Mini Playlist'.

The assignment will be graded on the following criteria:

- 1. Look and Feel
- 2. Code Quality
- 3. Understanding of the programming language.

This should give you a fair idea on how to use basic language constructs in Objective C. You are welcome to get creative and try out advanced features. Beware of memory bugs. There are a good number of tutorials on the Internet on basic app building in iOS. However, there is a thin line between learning from code and copy-pasting, so please be careful!

A word of the Youtube Data API:

You can either use RESTful service to fetch the playlist or use the Google Youtube Objective C client (recommended). RESTful service will require constructing HTTP requests and parsing JSON data, where as the Objective C client provides wrappers for the same.

Some basic setup:

- a. Setup the development environment for iOS. Download XCode if you have a Mac and create an Apple Developer ID if you do not already have one.
- b. Get the Google-Data Client for Objective C and import it to your project (if required)

Resources:

http://code.google.com/p/google-api-objectivec-client/

http://apiblog.youtube.com/2009/02/youtube-apis-iphone-cool-mobile-apps.html

http://code.google.com/p/google-api-objectivec-client/source/browse/#svn/trunk/Examples