

ITIS/ITCS 6010 – Advanced Topics for Mobile App Development
Homework 3

Basic Instructions:

1. In every file submitted you **MUST** place the following comments:
 - a. Assignment #.
 - b. File Name.
 - c. Student Full Name.
2. This is an individual assignment, each student is expected to work alone and submit their own work.
3. Your assignment will be graded for functional requirements and efficiency of your submitted solution. You will lose points if your code is not efficient, does unnecessary processing or blocks the UI thread.
4. Please download the support files provided with this assignment and use them when implementing your project.
5. Create a zip file which includes all the project folder, any required libraries, and your presentation material.
6. Submission details:
 - a. You should submit the assignment through canvas: Submit the zip file.
- 7. Failure to follow the above instructions will result in point deductions.**

Homework 3 (200 Points)

In this assignment you will develop a simple NPR client application (see <http://www.npr.org/api/index>). The application should be able to load information NPR programs, list the stories for each program and enable the user to listen to the audio stream provided by each story. For this homework you will be using a JSON parser as data loaded from the NPR API should be in the JSON format.

To list the programs, use the NPR API at <http://api.npr.org/list?id=3002&output=JSON>

To list the stories provided by a given program use the query api. For example to list the stories for the “All Things Considered” program (id = 2), then use the following api : http://api.npr.org/query?id=2&dateType=story&output=JSON&apiKey=YOUR_API_KEY

Feel free to use the NPR API Query Generator to investigate other queries if needed, which is available at <http://www.npr.org/api/queryGenerator.php>

Requirements

	Requirement	Description	Points
1	Listing of NPR Programs	The app should provide the user with the ability to view and interact with the list of NPR Programs, which can be retrieved by the NPR api.	20
2	Listing of Stories in NPR Programs	<p>The app should enable the user to select a specific program and view the list of stories aired by that program.</p> <p>You should make use of the content provided by the api, and should display the relevant text, dates and images that are associated with each story.</p>	50
3	Streaming the audio provided for a specific story	The app should enable the user to select any given story and play the streaming audio provided for that story. The user should be able to play, and stop the streaming audio.	30
4	Streaming audio playlist	<p>The app should provide the user with the ability to manage a playlist of the selected story audio streams.</p> <p>The user should be able to view the stories in the playlist, to add stories to the playlist and delete stories from the playlist.</p> <p>The user should be able to play the playlist in sequence one story after the other.</p>	100