# CS 638

HEADLINE READER

Android Mini Project

**OBJECTIVE:** Implement and demonstrate an Android application to speak out the headlines parsed from a RSS news feed.

**PROJECT DETAILS:**

The project is split into 3 parts.

1. The basic application will be displaying the headlines parsed from your favorite Yahoo RSS news feed in a list view and implementing the functionality of reading out the headlines one by one using a text to speech converter.

2. On clicking the headline display a new activity which shows the image associated with the news if any and the description of the news.

3. Implement functionality to read out a particular headline by using a context menu (long click).

Bonus: Implement the functionality to read out the description associated with the news headline as well.

**IMPLEMENTATION DETAILS:**

The project will roughly consist of the following classes/functionalities.

a. RSS Parser

b. Database class for storing the description, headline, image URL. (You may choose to use your own data-structure like the one we used in the class)

c. Activity Class for displaying the news in a list

d. Activity Class for displaying the news description and image

e. Text to speech libraries for reading out the headlines/ descriptions

f. XML files for creating the views.

Of the above classes, I will provide classes for the RSS parser, Database class, and the text to speech libraries.

**DELIVERABLES:**

1. Deadline: 11$^{th}$ February 2010
2. Demonstrate your application to Professor/TA
3. Include a "README.txt" with your submission.

**GUIDELINES/ RESOURCES**

How to go about this project?

Stage 1.

1. The way to go about this project is creating a new ListActivity for your project, import the classes provided to you and figure out how to display the list. If you decide to use the database class, you will be using a object of TxnDbAdapter and a Cursor to iterate through the list. (Check out the notepad tutorial on the android developer website for reference).

2. Once you figure out that, implement the functionality for reading out the headlines in the list, using a start/stop button in the options menu. (Again, similar to the walkthrough tutorial)

Stage 2.

3. Now create the context menu for reading out a particular headline when you do a long click on it.
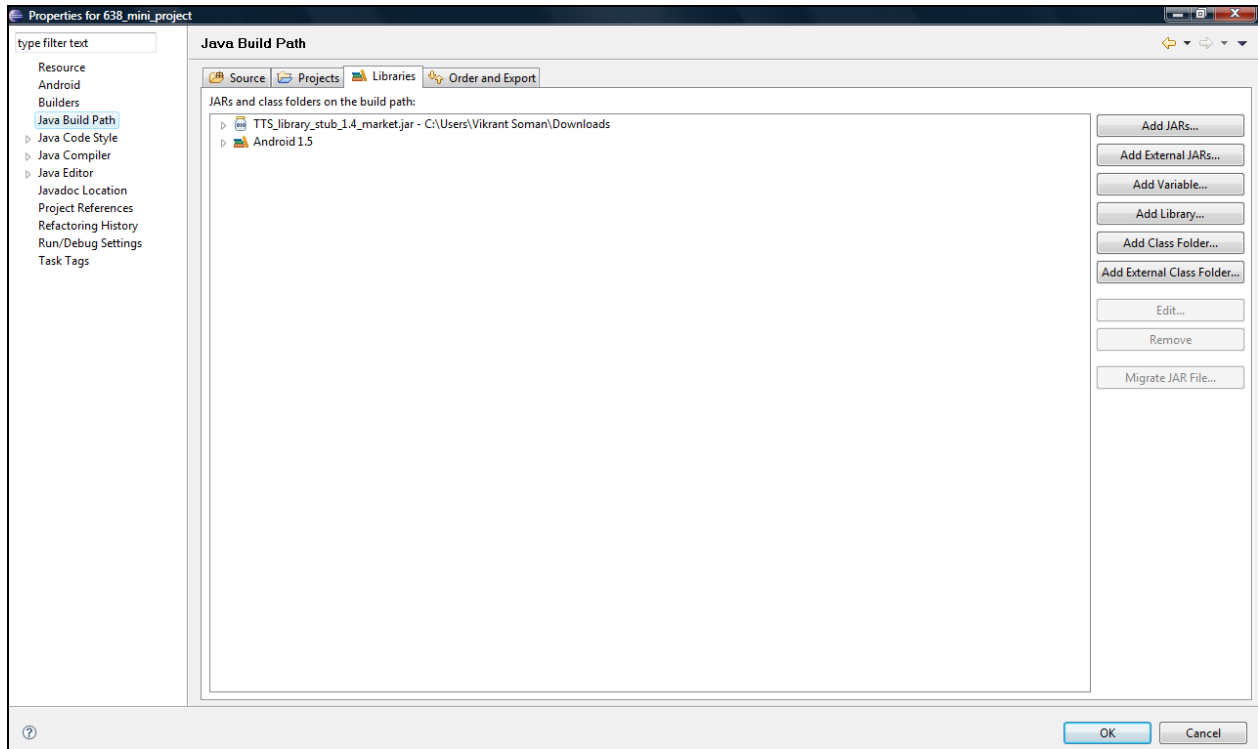
Stage 3:

3. Now try to create the other interface showing the news description and image associated with the news.  Here you will need to start a new Activity to display the details for a particular headline in the list and come back to list once done.


**INFORMATION ABOUT TEXT TO SPEECH LIBRARIES**

First and foremost for using the text to speech libraries you will need an AVD with a SD card image of size 1024MB created. You can do this by following instructions on the developer.android.com website.

For exporting the TTS libraries in your project do the following.

Add an external jar by going to Project > Properties > Java Build Path > Libraries > External Jar. After that choose wherever you placed your TTS (TTS_library_stub_1.4_market.jar) file and add it.

Incase of issues please contact me or TAs.

Vikrant Soman (soman@wisc.edu)