

CMSC436: Fall 2013 – Week 11 Lab

Objectives:

Familiarize yourself with Multimedia. Create an application that records and plays back audio files.

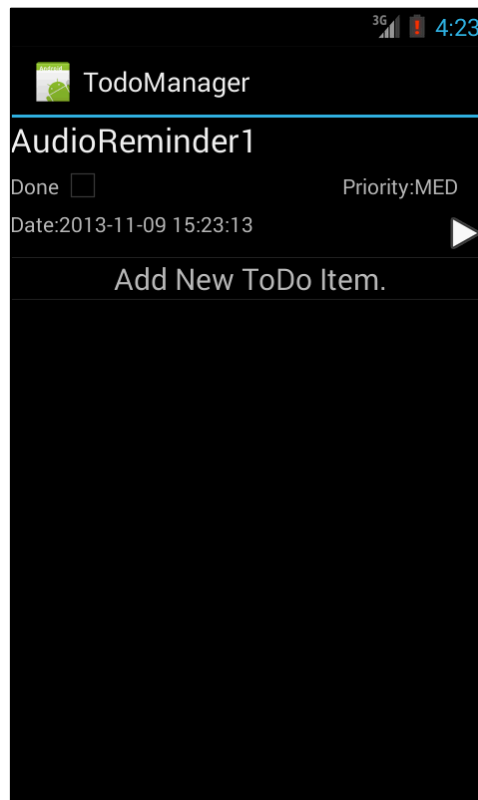
Once you've completed this lab you should have a better understanding of using multimedia in Android applications.

Overview:

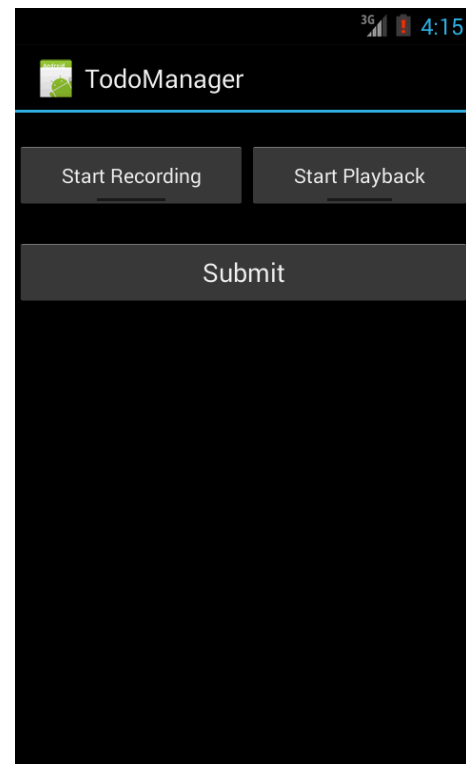
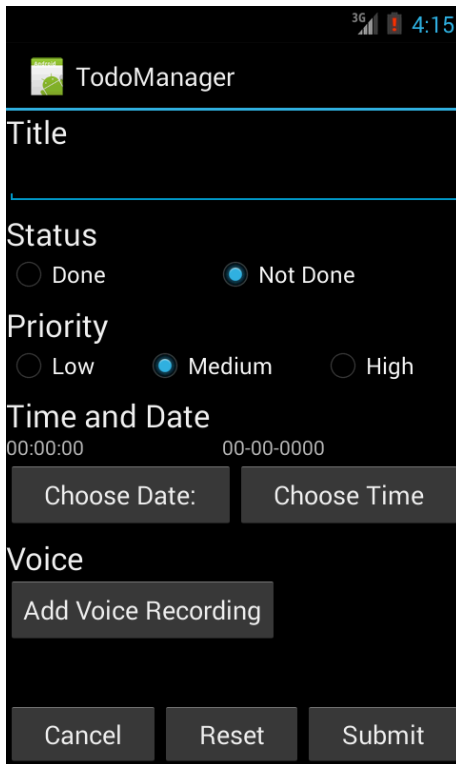
This lab has one part.

Part 1: Adding Voice Notes to the TodoManager

In this part, you will modify the TodoManager application from the UI lab to include an audio recording as part of a ToDoItem. The ToDo list user interface can remain the same as before (feel free to modify it as you see fit), except that now it should also include a “Play” button (shown as a triangular icon below).



When adding a new `ToDoItem`, you will also need a new section with a button labeled, “Add Voice Recording.” Pressing this Button should start a new Activity, which can be similar to what we used in the `AudioRecording` example application.



Do not allow the user to submit incomplete `ToDoItems`. Make sure that the user has entered all the fields of the `ToDoItem`. You are free to decide how to deal with missing information. For example, you might display a Toast message, insert default values, etc. In addition, add Cancel and Reset Buttons to the audio recording activity, so that the user can cancel the Voice Note, or can erase the current recording to start over.

Implementation Notes:

1. Download the application skeleton files from the Lectures & Labs web page and import them into your IDE. You are free to use your previous `TodoManager` application if you wish.
2. In `TodoManagerActivity.java`, implement the following method: `public static void play(Context context, String filename)`. This method should use a `MediaPlayer` instance to play the audio file whose name is stored in the “filename” parameter. The format of this “filename” is “/Todo_” + title of the audio file + “.3gp”. Make sure that you give each `VoiceNote` a unique filename.
3. In `ToDoListAdapter.java`, add an `OnClickListener` to the Play button when creating the `ToDoItem`'s view in `getView()`.

4. In AddTodoActivity.java, implement an OnClickListener for the “Add Voice Recording” Button that will start the AddVoiceNoteActivity class.
5. In AddVoiceNoteActivity.java, implement the AddVoiceNoteActivity class. This will be very similar to the code that was used in the AudioRecording sample application. You will need to implement listeners and associate functionality for the “Start Recording”, “Start Playback” and “Submit”, “Cancel” and “Reset” Buttons.

Deliverables: Your source code project