CSCI 4100 Mobile Devices
Assignment Three
Due: November 21, 2014

Introduction

In this assignment you will produce an Android or iOS application that takes and organizes photos based on location and time. Mobile devices all have cameras and are capable of determining their current location. In this assignment you will combine these two features in a single application that maintains photos sorted by location and date. The main interface to this application is a list of the photos maintained by the application presented in table format sorted by location. A table view or list view can be used for this, depending upon the platform that you are using. You only need to display photos taken by the application itself, you don't need to import photos from other sources. When the user selects a photo from the list the photo will be displayed.

The application should have a "photo" button that allows the user to take a picture using the device's camera. This photo is saved along with the location and time of the picture. Each photo should be saved in a separate file, and one file is used to store the location, time and file name for each photo. This last file is the one that is used to drive the main part of the user interface.

Resources

For Android the following web pages will provide the information that you need for taking pictures and determining location:

- http://developer.android.com/training/camera/photobasics.html
- http://developer.android.com/training/location/retrieve-current.html

For iOS we have already covered how the current location of the device can be determined. A simple technique for taking pictures with the camera is described in the "Camera Programming Topics for iOS" document in the assignments folder on Blackboard.

Report

The final report should include all the program code for your application along with a short report that describes the techniques that you have used in producing your application. The easiest way to do this is to place the report in the same directory as your project, produce a zip file of all the material and email it to the TA.