Assignment #6: ListView and MapView  
Due Date: Wednesday, 10/5/2011 by start of class

Purpose: This purpose of this exercise is for you to gain experience in working with the ListView and MapView controls and to reinforce your understanding of using multiple Activities.

Description: In this exercise, we will work with two activities: a select-from-a-list activity and a mapping activity.

Selection Activity:  
The first Activity should present a list, in a ListView, of the names of the four “Tobacco Road” universities – Duke, North Carolina, North Carolina State, and Wake Forest.

When an entry in the ListView is clicked, the second mapping activity should be triggered.

Mapping Activity:  
The second activity should show, using a MapView, an appropriately zoomed satellite view of the university chosen in the first activity. The second Activity should not maintain any of the data in the system (i.e. no arrays of information) – it should just receive data from the first activity and use that data when mapping. No return value is required from the mapping activity. To go back to the original activity, you can use the device’s back button (no special handling of the back button is required).

Here is the latitude and longitude information for each university.

<table>
<thead>
<tr>
<th>University</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duke</td>
<td>36.001111</td>
<td>-78.938889</td>
</tr>
<tr>
<td>North Carolina</td>
<td>35.908333</td>
<td>-79.05</td>
</tr>
<tr>
<td>North Carolina State</td>
<td>35.785548</td>
<td>-78.67157</td>
</tr>
<tr>
<td>Wake Forest</td>
<td>36.131378</td>
<td>-80.283661</td>
</tr>
</tbody>
</table>

Helpful Hints: Make sure you have updated the AndroidManifest.xml file with all the necessary changes required to use maps: permissions, library usage, new Activities, etc. You have to have an API key before being able to use a MapView.

It is up to you to choose an appropriate zoom level – remember they range from 1 to 21. Choose a zoom level that shows the university and nearby surrounding area. A zoom that is too far out will show just the surrounding city, a zoom too far in will show only a small part of the university. Notice that, in the view of Wake Forest in the example screenshots on the next page, you can see the campus as well as some nearby places such as Reynolda Road and Silas Creek Parkway.
Example screenshot:

UniversityFinder

Duke

North Carolina

North Carolina State

Wake Forest