CS 380

Homework 6
An Android app
Due:?? (if at all, then the last day of classes)

Again, this is intended to be a group project. You may keep the same groups as HW5, or form a new group. Also, you may work independently. (I expect that this will be more fun if you work in a group)

Below I will describe one possible project. Do not feel limited by the project I describe. If you would like to do something else, then suggest your idea to me. Any idea you suggest must include the following required elements:

Requirements:

1. The app must have at least 3 screens and ways of navigating among those screens.

2. At least one of the screens in the app should use a ListView

3. The app must communicate with the database on comet.cs.brynmawr.edu to retrieve data from a database of your design
   1. This pretty much requires writing some PHP to implement that communication
   2. The contents of the database are outside requirements of the assignment. That is, you can put all the data in by hand.
   3. You need not have must data in the database. Enough to show that your app works.

4. The database should have at least 2 tables that are linked by a foreign key relation.

5. If your app stores data locally, it must use SQLite for that storage.

App idea — A cooking/recipe app

The idea here is that you start by getting from the DB a list of possible recipes. (Display those in a ListView. Then select one. Get the details of the selected recipe from the DB and display that in a new screen and probably in a new ListView. Tap on a step to get details about that step. Each step may have an independent timer that could be
started and stopped. The timer, if running, would show up in the step-by-step view. Possibly, have things go away from the step by step view when marked as complete.

I imagine that the screens for this app could look something like the following (please forgive my simplistic renderings). If you would like better drawings, make an appointment and we can meet in Park 231 and go wild with white board markers.

Importantly, the drawing below is not intended to constrain you. Rather it is just intended to give you an idea of the what I am trying to suggest.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>dessert</td>
<td>Recipe 1 name: Possibly a small picture</td>
</tr>
<tr>
<td>2</td>
<td>main course</td>
<td>Recipe 2 name with pic</td>
</tr>
<tr>
<td>3</td>
<td>snack</td>
<td>Recipe 3 name</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>step 1</th>
<th>Requirements</th>
<th>Summary</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>step 2</td>
<td>Requirements</td>
<td>Summary</td>
<td>In process 2:30:00 remaining</td>
</tr>
<tr>
<td>step 3</td>
<td>Requirements</td>
<td>Summary</td>
<td>Not started</td>
</tr>
<tr>
<td>etc</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recipe Step N
This is a very detailed description of what you need to do
Possibly a picture
Button to mark as started
Button to mark as done
Button to start a timer for this step
Countdown timer counter

I have also considered an app to do things involving the Towers of Hanoi. If you want to discuss that, ask.