**Introduction**

The purpose of this project is to give you practice using basic Android app programming concepts and techniques.

**Proposal**

Write an app proposal that contains the following:

* A two or three paragraph written description.
* A list of features
* A simple diagram for the UI of each activity and/or fragment in the app, with the type of UI element identified.

Submit a single document that is not zipped. Use .pdf, .docx, or html formats.

**Requirements**  
The application must have the following:

* At least 5 kinds of widgets one of them should use an adapter (like a Spinner or a ListView)
* At least 2 activities or fragments
* The activity layout should change for screen orientation.
  + If you are using fragments there should be activity layouts that load different arrangements of fragments for different orientations.
  + If you are not using fragments, then each activity should have a different layout for each orientation.
* Save activity and/or fragment state during rotation. Design your app so that there is at least one variable or object that will be persisted during rotation.

**Presentation**You will present a demo of your app and a brief code walk-through on the day scheduled for the final exam.

**Submission:**

Zip the solution folder (first, delete the bin and obj folders) and upload it to Moodle.

Note: If your zipped solution file is larger than 10MB, you won’t be able to upload it to Moodle. Instead of uploading it to Moodle, you can upload a document with a link to some kind of online storage containing your project (Dropbox, iCloud, GitHub, BitBucket, etc.).