## CS4301 Android Development

## Spring 2019 Assignment 4

This is the second part of your contact manager. Since we have just learned about sensors, your task is to make a sensor affect your app.

The suggested implementation, based upon what you have so far, is to detect shaking using the accelerometer, and re-sort the contacts in the reverse order from how they are currently sorted. That is, if they currently show up alphabetically from A to Z, shaking should cause them to sort from Z to A, and vice versa. Or, come up with your own idea for how some sensor should interact with the contact list and **e-mail me for approval within three days of this assignment being posted.** I will approve as quickly as practical, probably within less than 24 hours. If I approve, proceed; if not, you must implement the above suggestion.

You will need to determine approximately how much motion is needed to cause this, since the accelerometer is very sensitive device. You have seen that a phone sitting flat on the podium has slight fluctuations in its readings. So do some experiments. On the Programming Tips page you’ll find a low-pass filter you can use.

This should involve writing one new class and possibly one or two functions. Thus it does not count as much as other phases.

**If you are working with a partner, stay with the same partner for this phase.** Only one person in a group should submit the assignment, but make sure you put the other person’s name in the upload information. Both people will get the same grade unless both agree one should get a different grade. In addition, if you are working with a partner, the names of both people must be in the header comments in each source file and the name of the person who wrote each function must be in the header comments for that function. You may be asked to demonstrate the program’s operation to the TA.

|  |  |
| --- | --- |
| **Grading criteria** | |
| Program works according to above specification | 45 points |
| Program comments, including names of authors in functions | 5 points |
|  |  |