Sensor Lab

What Project I Chose:

For this lab, I chose to modify the code by implementing a system that tracks if the phone is completely flat. I decided to do this project because it would allow me to directly interact with the new Pitch and Roll variables and figure out how they work.

How My Project Works:

Upon launching the app, the pitch and roll of the device will be tracked. The Azimuth will also be tracked, but this variable is less important to my app. The side spots will still grow darker depending on the direction and tilt of the device.

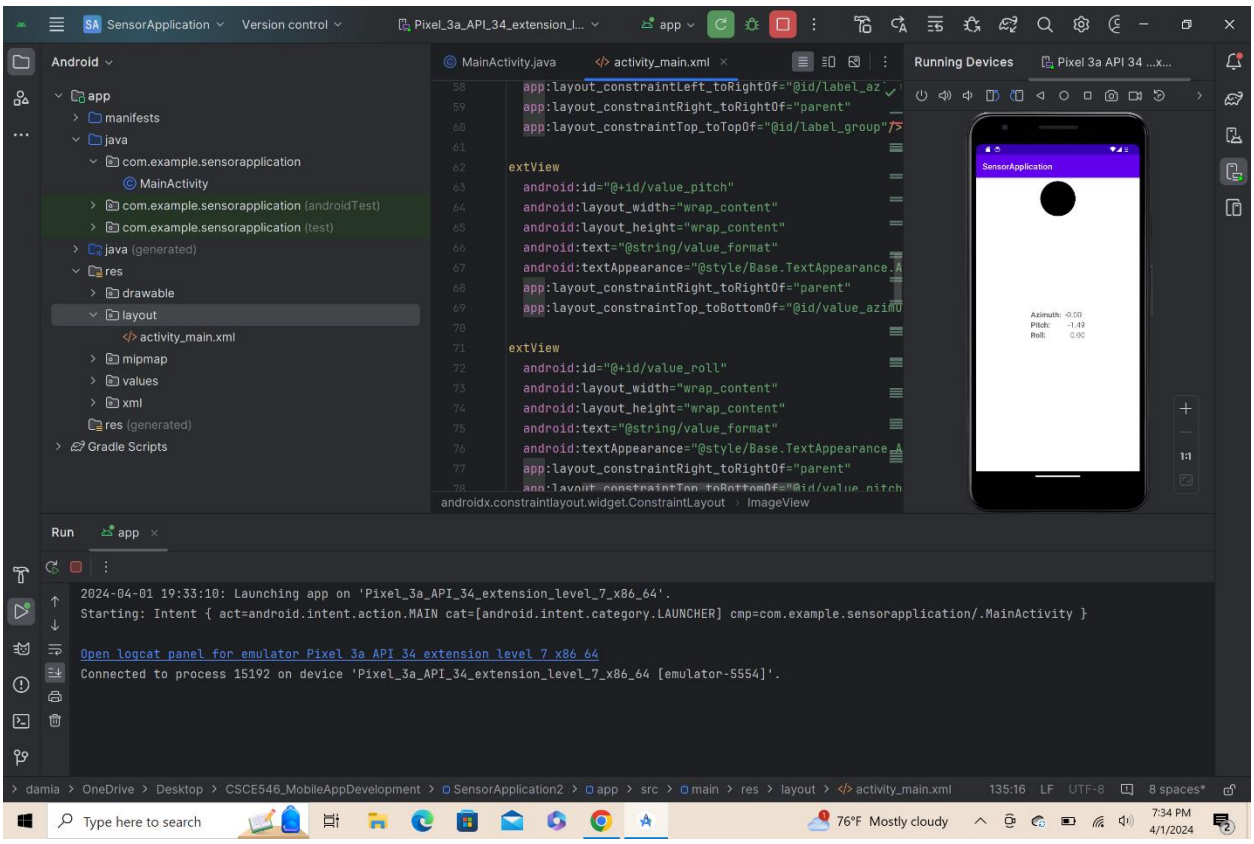
The main function of the app comes when the pitch and roll are both equal to 0. This will signal a success to the user, and place a spot in the center of the screen.

The purpose of this is to act as a challenge. The user can attempt to keep the phone flat for as long as possible.

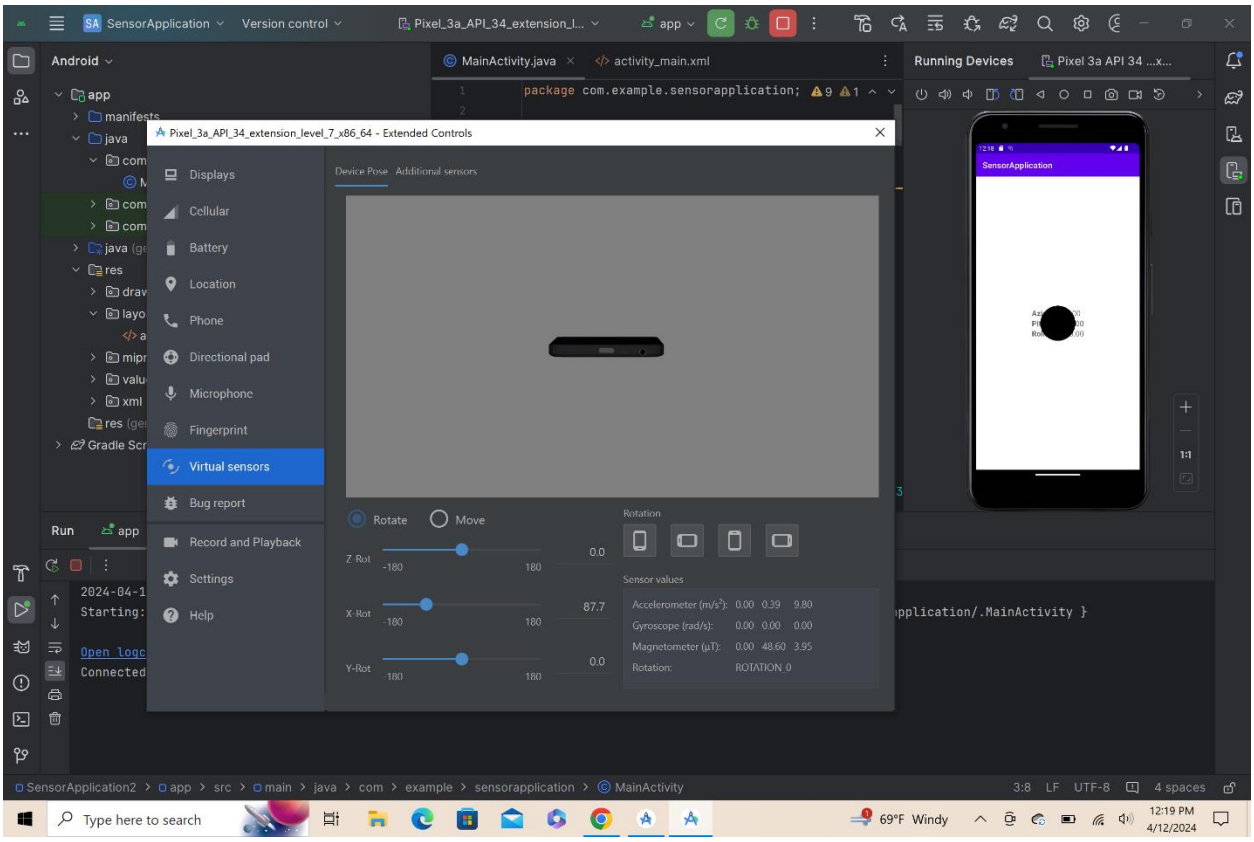
Here is a screenshot of a failed attempt:

The phone is not flat. Therefore, no circle in the center.

I did leave the side circles in so that the user can see which direction the phone is tilted in.



Here is a screenshot of a successful result:



In this result, the only spot that appears is the one in the center. This is meant to act as a success to the user. If they were to tilt the phone in any direction, this spot would disappear.

What Did I Learn:

I learned more about how the images move around the emulator (especially in my failed attempt at the water gun game app). I also learned more about how the device responds to Azimuth, Pitch, and Roll (and what those are at all). Another thing I learned is how to tilt the device in the emulator using the extended controls.