

## Documentation of Lab 2 Assignment

Video: [https://youtu.be/BDJj\\_b821Qs](https://youtu.be/BDJj_b821Qs)

GitHub Link: <https://github.com/cswanderson/IMTC-505-Lab2.git>

I used the right thumb controller for both the movement of the drone and the camera. As there wasn't a point of reference it becomes hard to tell which direction the camera or drone might be moving. The trick was to map the forward movement of the drone to the backwards movement of the camera and the same for left and right movement. The reverse of this could be done on the left controller for left-handed users. I used the trigger for the laser on and the side button to turn it off as triggers are normally used in that way. The left and right turn were mapped to the left controller hat as it seemed easier to differentiate from the camera and movement in the right.

Of the other 3 that I chose, here are some differences to my implementation.

Drone\_Qi.apk:

The right hand forward brings the drone closer, and the left hand forward moves it forward which I found confusing as there isn't anything in the environment to suggest which is the camera and which is the movement of the drone. In mine, I chose to combine them in one control to make it easier. The laser was on the side buttons which is confusing as it's usually mapped to the trigger.

Yuzi\_droneBuild.apk:

The triggers were used for turning left and turning right which didn't really turn, but it only did it every time you tapped the trigger. The controller hats are normally used for movement, so it was confusing. That's why I tried to keep steering in an intuitive place, but in the left hand. Again, it was hard to tell if the right and left thumb controllers were camera or movement in the absence of objects or an environment.

abhishek-rakshit-lab2-drone.apk:

The camera was in the right and movement in left, which seemed usable as there was a smart idea to put objects in to provide perspective of the controls, so it wasn't confusing. Although I prefer the movement in the right hand. The laser didn't quite fit for me as I was expecting the trigger to be used.

I assume there are some givens with these types of controls that are linked to videogames:

- Controller joysticks/hats are normally used to move things
- Triggers are usually there to trigger things..
- Left, right, forward, and back directions are confusing without objects and environments for orientation

So I used these as logically as I could.