

IMTC 505 Lab 2

Brock Legentil

For my implementation of the drone in part 2 of the lab, I decided on the left hand being strictly used for controlling the player, and have the right hand fully control the drone. Thus I mapped the left analog stick to the player movement (all cardinal directions). The right hand I had the analog stick mapped to move the drone forward, backward, horizontally left, and horizontally right. The trigger was used to rotate the drone right, and the middle finger button was used to rotate the drone left. Laser controls were also on the right hand, with the A button being used to turn the laser on, and the B button being used to turn the laser off.

A table showcasing my button allocation choices, and the three other APK's I downloaded is shown below.

Student	Plr Fwd	Plr Bkwd	Plr Right	Plr Left	Drne Fwd	Drne Bkwd	Drne Right	Drne Left	Drne Trn R	Drne Trn L	Laser On	Laser Off
Brock	L jstck fwd	L jstck bwkd	L jstck right	L jstck left	R jstck fwd	R jstck bwkd	R jstck right	R jstck left	R trigger	R middle	A	B
Yuzi C	L jstck fwd	L jstck bwkd	L jstck right	L jstck left	R jstck fwd	R jstck bwkd	R jstck right	R jstck left	R trigger	L trigger	A	B
Erfan Raoofian	L jstck fwd	L jstck bwkd	L jstck right	L jstck left	R jstck fwd	R jstck bwkd	R jstck right	R jstck left	R middle	L middle	A	B
Mao Tian	R jstck fwd	R jstck bwkd	R jstck right	R jstck left	L jstck fwd	L jstck bwkd	L jstck right	L jstck left	L middle	L trigger	X	Y

Note that each user implemented the controls in a different manner. The most intuitive for me when it came to designing a control scheme was to separate the objects out into two hands, and to have the player move using the left since I am used to that in other VR games. I think that having the hands separate for player/drone movement allows the user to segment off and let them focus on both things at once while doing well in both movement of the player and flying of the drone. Mao did something similar, however he had flipped the drone and player hand, which was the most confusing for me. Yuzu and Erfan had similar control schemes and laser activations to me, however they implemented the drone turning differently. Yuzu used the

right and left trigger to turn the drone, while Erfan used the left and right middle finger buttons. I think both of those work and after learning would become intuitive to me after a short time given this was an actual VR experience of flying a drone around.