# Oculus Rift and Kinect Issues

## Movement:

Movement issues have been experienced because the only way to move forward while using the Kinect and oculus is through some form of gesture. The idea is to push your hands away from your body to stop moving forward and to pull towards your body to start moving. The Kinect does not pick up the movement that precisely so you can push which the Kinect would sometimes read as pulling and vice versa.

To turn the users body the plan was to use other gestures such as the swipe left and swipe right which would simulate the user actually turning their body but the Kinect sensor for this type of movement is very crude and rarely ever picks up the movement.

The conclusion is the gesturing for the Kinect is very inefficient and makes it hard to perform any actions in regards of spinning the users body as well as moving forward and backwards.

The solution that we proposed was mapping the Kinect body to the oculus movement so that when you turned your head your body would turn with you but to do this the rotational values must be removed from the Kinect sensor which enables the mapping of the sensor to a user’s body. Unity does not allow us to change a single variable from multiple sources to avoid collisions in the code so this method cannot work because we require the Kinect and the oculus to be working together not the Kinect miss-reading the user’s body and glitching or failing to read the user all together.

## Next Proposed solution

The next idea to arise while I was writing up this document was to make a box which recorded its past movement and reset if it loses track of the user that will act like the gesture controller but within the 2D space of the camera view. This means if we map the object to the players hands and both hands were to move to the right together then the user would turn that way.

Will attempt to write the custom gesture on Sunday so it can be debugged on Monday with the oculus.