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**MK Grad Program Task- Development Log**

Im beginning by doing some research into the basic mechanics that I will need to implement for this game. Namely the thumbstick controls, as this isn't something i've implemented before so I want to see a few examples before working on my implementation.

After my research, I have decided to not attempt to reinvent the wheel for this task and I will utilise the unity standard assets cross platform input package for my touch controls. The next step from here is to get to the point that I have 2 joysticks in roughly the right position and be able to read when those sticks are manipulated by a player.

Having implemented the basics for my input I will now move on to prototyping my movement and rotation controls and having a camera that follows the character as he moves.

I am creating my character for this project using the Free ProBuilder asset, I have decided that for this project I will make a simple tank as my character and will use the tanks turret turning to represent the characters look direction.

Now that my character model is in I am rigging it up with the movement scripts I created while I was prototyping. Since I am using my input directly as the movement direction the movement seems very sharp and jerky when turning quickly. If I wanted to make this smoother I would utilise a slight linear interpolation between the input direction and the actual direction of movement.

Moving on to the shooting mechanics, I have created a simple cylinder to act as my tanks cannon shot, this will simply move forward in a straight line until it hits an object and it will then destroy itself. If I was expecting there to be a large number of projectiles being created and destroyed in my scene I would utilise object pooling to aid in performance.

Im now happy with the mechanics of my game, Since its working fine using Unity Remote I will now test building it to mobile and sort out any issues I find.