## Week 2

## Carson:

I started the week by beginning the modularization of our code. My goal for this step was to create a general file structure that we could all adhere to. In the end, I kept the index.html and style.css outside of any folders, a folder for all of our models, a folder for all textures, and a folder for all of our javascript files. I also began the groundwork for what our javascript files would look like. After I finished that, I moved onto researching a potential AI library we could use, and a way to have a character model focus on the cursor on screen. Lastly, I began rewriting some code to have the camera follow the selected character. I now have the camera following the banana model, and you are able to rotate around it by clicking with left click and dragging the cursor. My goal is to be able to do this with middle click, but also be able to rotate with Q and E.

## Mat:

I began thinking of how to implement range into the actor class. After some time, I wrote the range scan algorithm. It involves checking every space in the actor's range. I realized that this was overly complicated and arrived at the the inRange() function of the actor class. This involves taking sum of the differences of the actors' positions against the attacking actor's range. If the sum is greater than the range, the actor is out of range. After more consideration, I determined that the range scan algorithm could still be useful for other applications. I implemented it in the actor class as a function that returns a 2d array that holds a '1' in each cell that the actor can affect with the center being the position of the actor. It will more than likely be refactored and relocated when we have more stuff in place.

I also spent some time attempting to clean up and modularize our files with the rest of the group.

## Emily:

I first wanted to focus on why the texture wasn't loading on my cat object. After trying multiple strategies, I ended up downloading more models and their textures from turbo squid to see if they would work. I finally got a banana model to work along with its .png texture. It seems like it worked either because of the format of the texture (.png rather than .rar) or the smaller size. After this, I added simple code to restrict the banana object to the map. I called console.log() on the model's Vector3 value to see its exact position. After seeing the values of the map edge, I was able to confine the model's movement to within this space. My next step was to add a highlight square on the map. This will be used to visibly reflect a character's range. I added a small, yellow plane in front of the banana and made it move when the banana moves. After this was working, I added three more squares to surround the banana and made sure each moves with the model as well.

I, too, spent time reworking our file structure to modularize our code.