**Cole Dorman Programming 1, Assignment 1  
  
Development Progression:**

Initial development was mostly done via the inspector, playing with things to see what I wanted, then it turned into me coding some very basic scripts for movement, and then the aiming, along with the shooting, all as components that are separate from one another. This was since I had modularity and single responsibility in mind.

**Challenges:**

One of the most unexpected challenges I faced was trouble initializing the GitHub repo, which was due to me trying to do it a new way, which was using the built in support GitHub desktop has, instead of making and configuring the. gitignore file manually.

The next large challenge I ran into was the cursor targeting logic. I will split this into 2 parts as there were 2 aspects that caused issues, Initially the scaling of the parent object making the child object (TankBarrel) change scale to fit inside the parent which looked very odd, secondly I had a problem where the fire angle was the position relative to the origin point and not relative to our player, which caused some very odd aiming problems. I quickly solved this by changing Atan to Atan2 since Atan only works in 2 quadrants.

A screen shot of a computer

Description automatically generated

**Topics I need more practice with:**

I will need more practice with most of the content the beginning of assignment, while I do understand it, I need more practice to solidify it in my memory.

**Next steps if I were to continue:**

My next steps would probably be to allow the NPC to fire, along with a simple aiming script for the NPC as well as improved movement and then I would go add some squares and rectangles to provide cover for the player and create a little arena.

**Additional Comments:**

N/A

**How I found the format:**

The flowchart format I struggled with a bit, as I found it confusing since we had things mentioned in the requirements but not in the flowchart, as well as how there was 2 different flowcharts one of which had the wrong requirements.

**Timeline:**

* Initial Prep - 1hr
* Brainstorming - 3hrs
* .gitignore - 2hrs
* Testing Implementations - 4hrs
* Refinement & playtesting - 2hrs
* Creating video – 5min
* Writing PDF – 3hr

**Suggestions:**

I would appreciate less focus on writing and more focus on in person questions and check-ups if possible. I feel like I would preform much better being able to talk about it instead of monologue. Also, it would help to have the requirements more clearly outlined, along with expectations.  
  
**Self Reflection:**

1/1 Setup Player correctly

3/3 Movement

3/3 Rotation

5/6 NPC

3/3 Commenting and organization

3/3 Code quality (-1 per bug)

1/1 Title screen and Game Over screen