Self Reflection Report

Throughout the months of rigorous learning and creation, I successfully completed my Maya project, featuring an impressive artistic style, complex modeling, and outstanding animation surpassing my expectations. Initially, I set a higher goal for myself due having a little experience on Maya, because I was determined to challenge myself and acquire new skills.

The most challenging and rewarding aspect of my project was the meatball animation. Many of the references I search from previous students' works did not incorporate rolling with proper deformation when interacting with stairs. However, I was able to successfully do that, which proved to be a significant challenge although the process is difficult. Initially, I attempted to utilize two curves to control my movement, with one being for self-rotation and the other being used to been followed by the object. However, my limited experience with Maya, specifically in the animation aspect, made it difficult for me to create a rolling meatball like Huddle in the game "Inside". Despite searching for tutorials online, I was unable to find sufficient guidance on this task and ultimately failed.   Luckily, Yashasvi from Digital Effects gave me advice on using nCloth and helped me adjust its attribute parameters to fit the the deformation produced when the soft body rolls down the stairs. So far, I had been able to create a meatball with soft body attributes that performed well when interacting with stairs. However, I have encountered another issue that needs to be addressed.

In order for the simulation to function properly, it is necessary to include various forces such as gravity and additional forces as needed. In my project, the meatball only has gravity when rolling down stairs, but for the impossible stairs, the animation requires the object to form a circle. As a result, I need to find a way to alter its simulation path in order to achieve this effect. I first attempted to use a circle to control the movement path, but was unsuccessful as I couldn't find a solution to integrate it with the simulation. With the help of Veno, we were able to add air force and use keyframe animation to control the position of the air force, ensuring that it would continue to provide the necessary force for the meatball to move along the stairs. Through this method, I was finally able to achieve the desired result.

Through this experience, I became aware of the importance of layers when composing the final project. Animations or films are constructed differently than games, which I am more familiar with. Animations use offline rendering with multiple layers that are later composed together, while games are rendered in real-time. Furthermore, the script tool that I created for this project has also been a valuable learning experience, as it allowed me to reflect on the role of Technical Director and the crucial value they bring to the entire film pipeline. They help to simplify the process for artists by creating more efficient methods to solve problems.