

Reflection Report

I am very happy with the gumball machine and the claw models. The shaders and textures could use a bit more work. Some bump or displacement maps could be added and some dirt and things like fingerprints or smudges on glass and worn or chipped ABC bricks edges could add to the realism.

The hardest part of the whole project was aligning the Penrose staircase to the camera and the overall composition and perspective of the piece. The solution turned out to be changing camera to orthographic view but also listening to some friends' advice and changing perspective of the gumball machine and the claw as I had them aligned in a very weird way before. After listening to the feedback, it looks much more convincing.

Another challenge was scripting but it was a good experience. I am proud of the code I wrote. It was easier than expected and saved me a lot of time, especially when it turned out that I could reuse some of the code I wrote for the gumball machine balls for the stairs. I wish I could refactor the code to make it more user friendly, have the variables easily accessible, easier to find and change. It would be nice to have a UI for the tools as that would make them much more interactive, easier to use and likely more expandable.

I really wish I have done a better rig for the claw and maybe even the ball and the machine. I can see a lot of mistakes in my simple group-based rigs. I would like to revisit the claw rig and make sure it is easy and nice to animate with. I was initially planning to have a springy wire as a part of the claw but I had trouble generating it both using code and manually and then a problem rigging it convincingly. Hopefully I can rig the claw with a wire again in the future as it seems like a nice challenge.

I am proud of how the animation loops, but it could be more polished and the speed of the ball more varied as it still seems very even. I like how it rolls out of the machine but the jumps themselves could be less evenly spaced and the ball should slow down gradually before being picked up by the claw. There is definitely a lot of room for improvement to make my happy bouncy rubber ball have more weight, personality and be more realistic.

Currently, the light still leads the viewer's eye onto the top of the staircase but making it more interesting and lighting up the left side of the frame a bit more could be a good change. I would probably try re-rendering everything with better quality than the brief says and would fix things like the noise in Nuke.

The renders seem nice and clean, there is only a tiny bit of noise but it is barely noticeable, and even though the lighting and texturing is quite flat it still gives a nice happy and bright effect and does not giveaway the illusion.