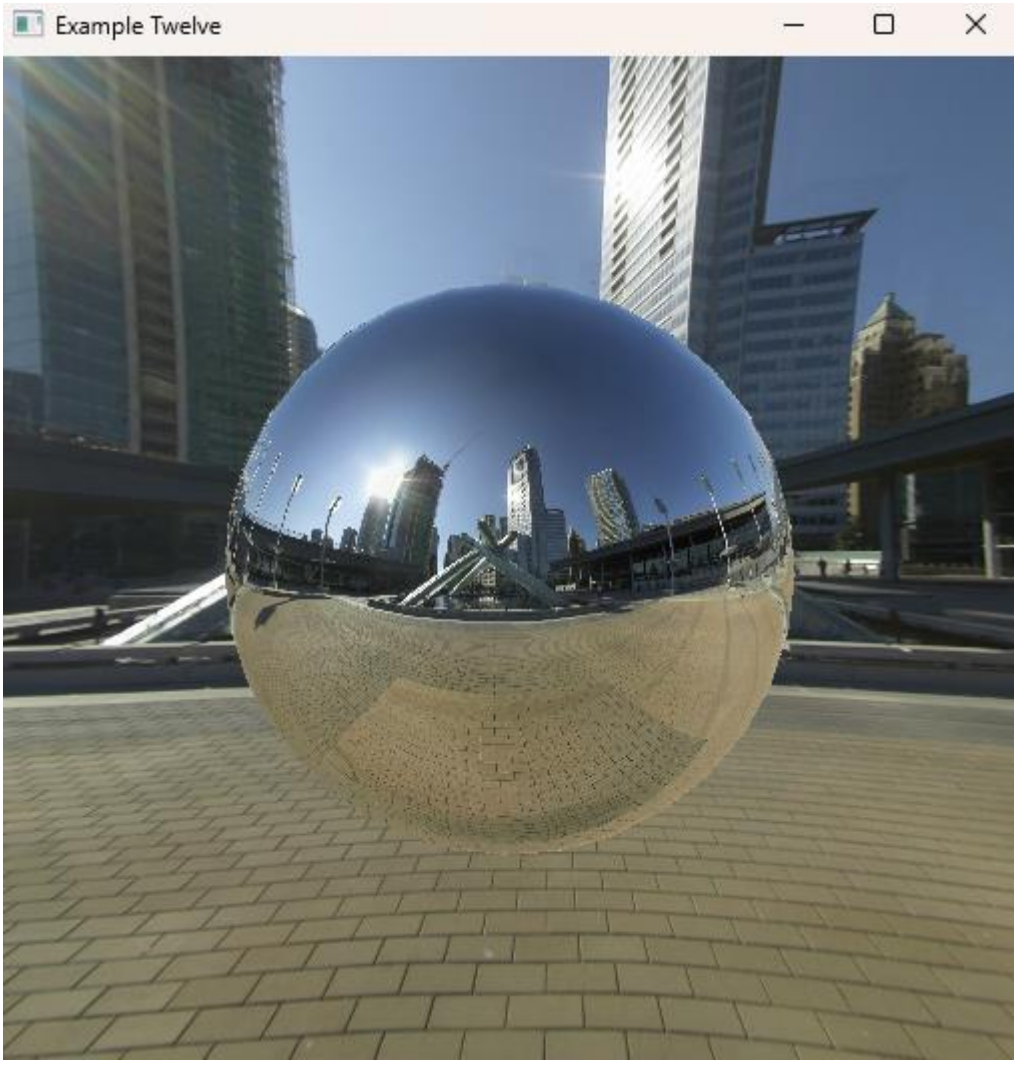
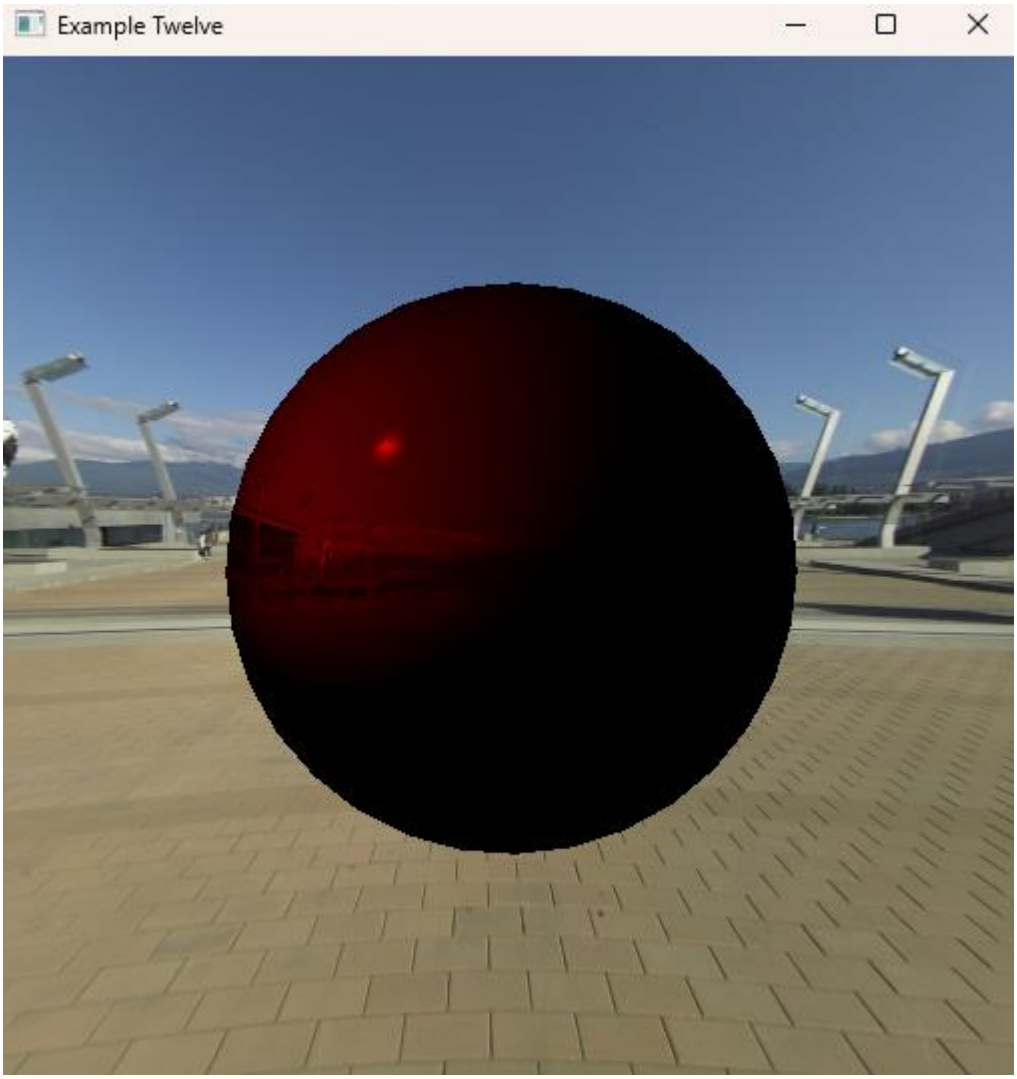
Daniel Hinbest - Assignment Three

Reflection and Refraction



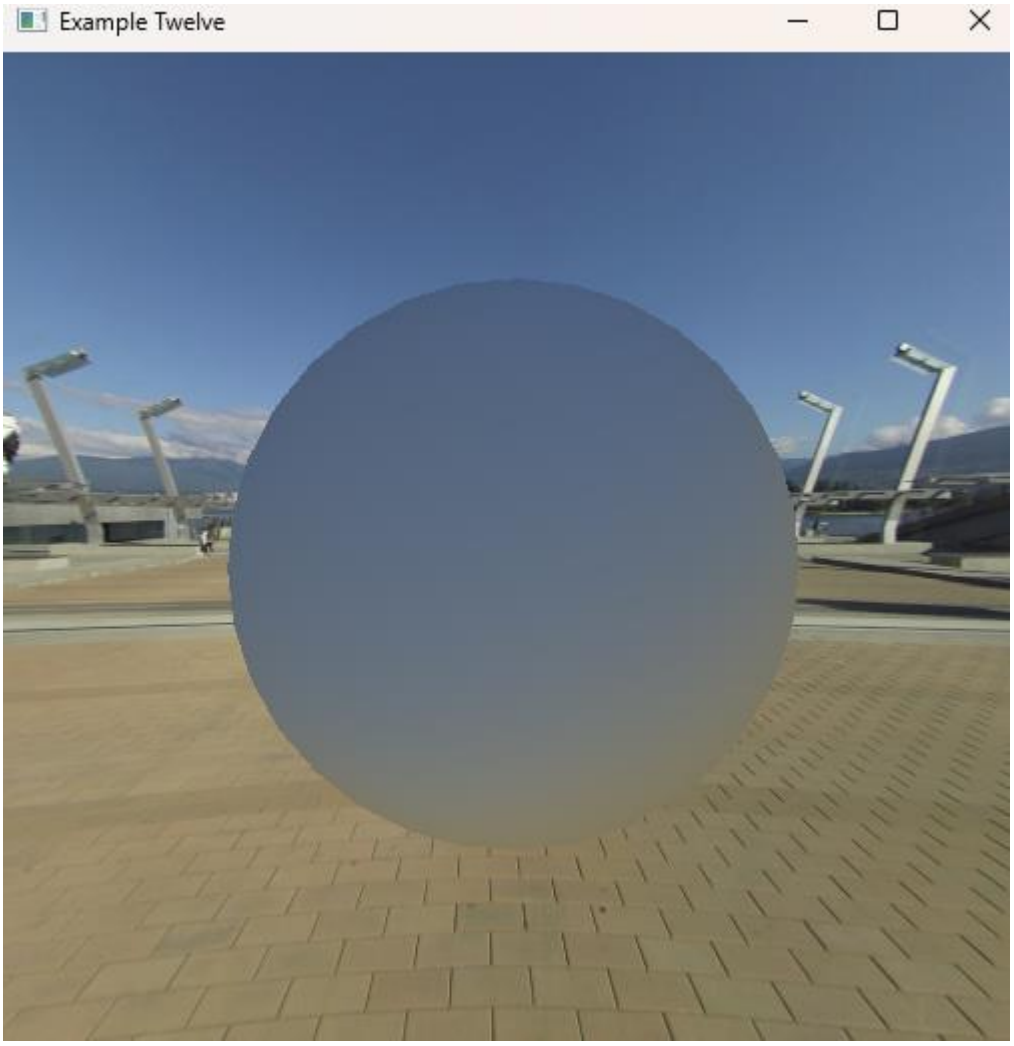
For this example I created a schlick function to determine the light and angle of the light. It also uses the environment map, position, eye, and refractive index to combine the colours using the schlick function.

Diffuse Reflection – Part One



This one was more of a struggle for me. I was not able to produce the desired outcome and decided to focus on part three and was not able to get enough time to get back to this part. I had created the irradiance map and had added it to the program, but I was not able to get it to find them and led to this result.

Diffuse Reflection – Part Two



This was another challenge and I don't think is quite the result intended but was as close as I could get. I used 500 samples from random to get this result. I had to use the Piazza threads for clues as I was in need of assistance, and was able to implement the contents of random.fs into my example12c.fs shader file. I then looped through the contents of the samples to create the diffuse reflection and created a diffused output.