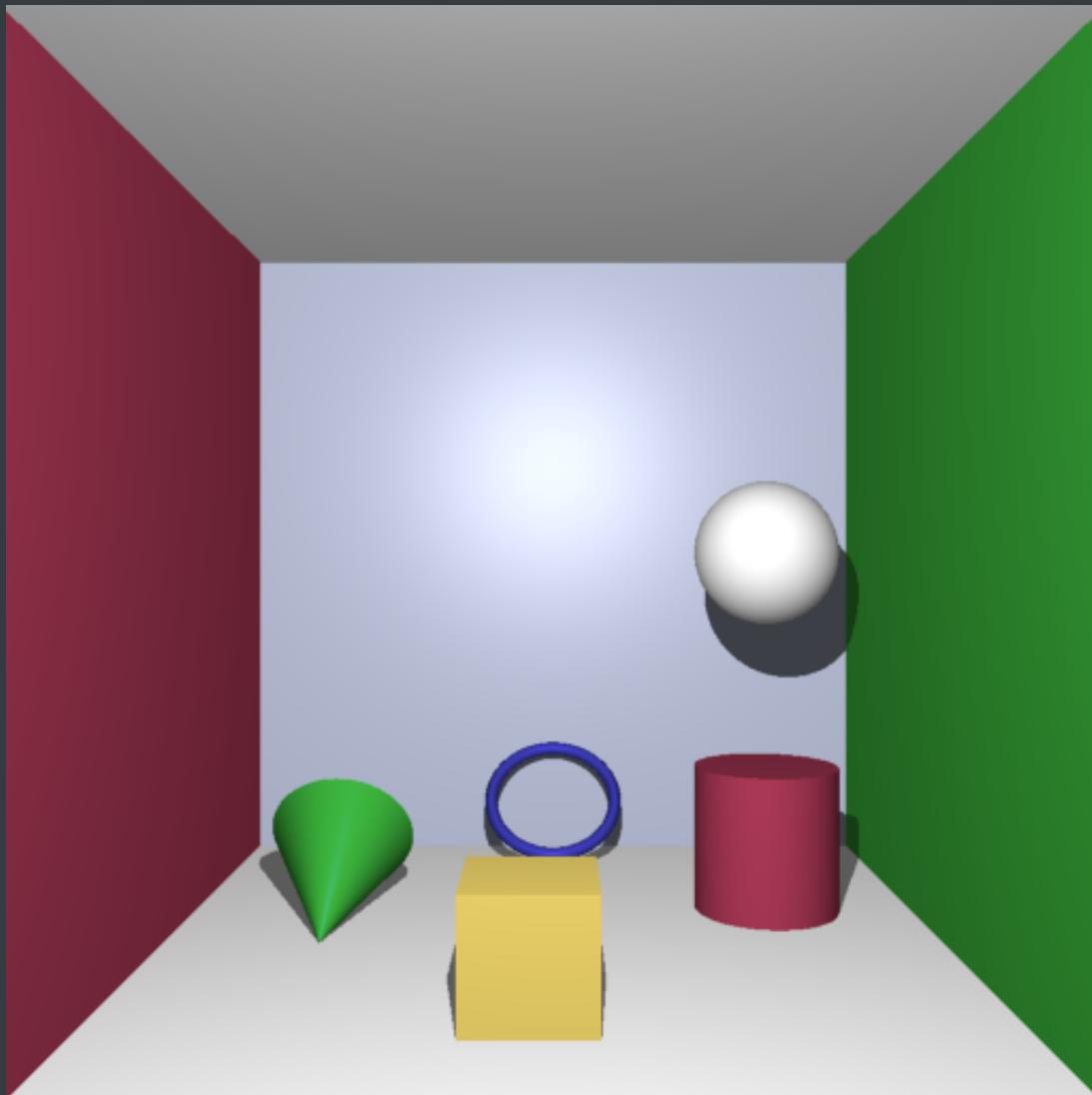


CS 488 Final Project Demo

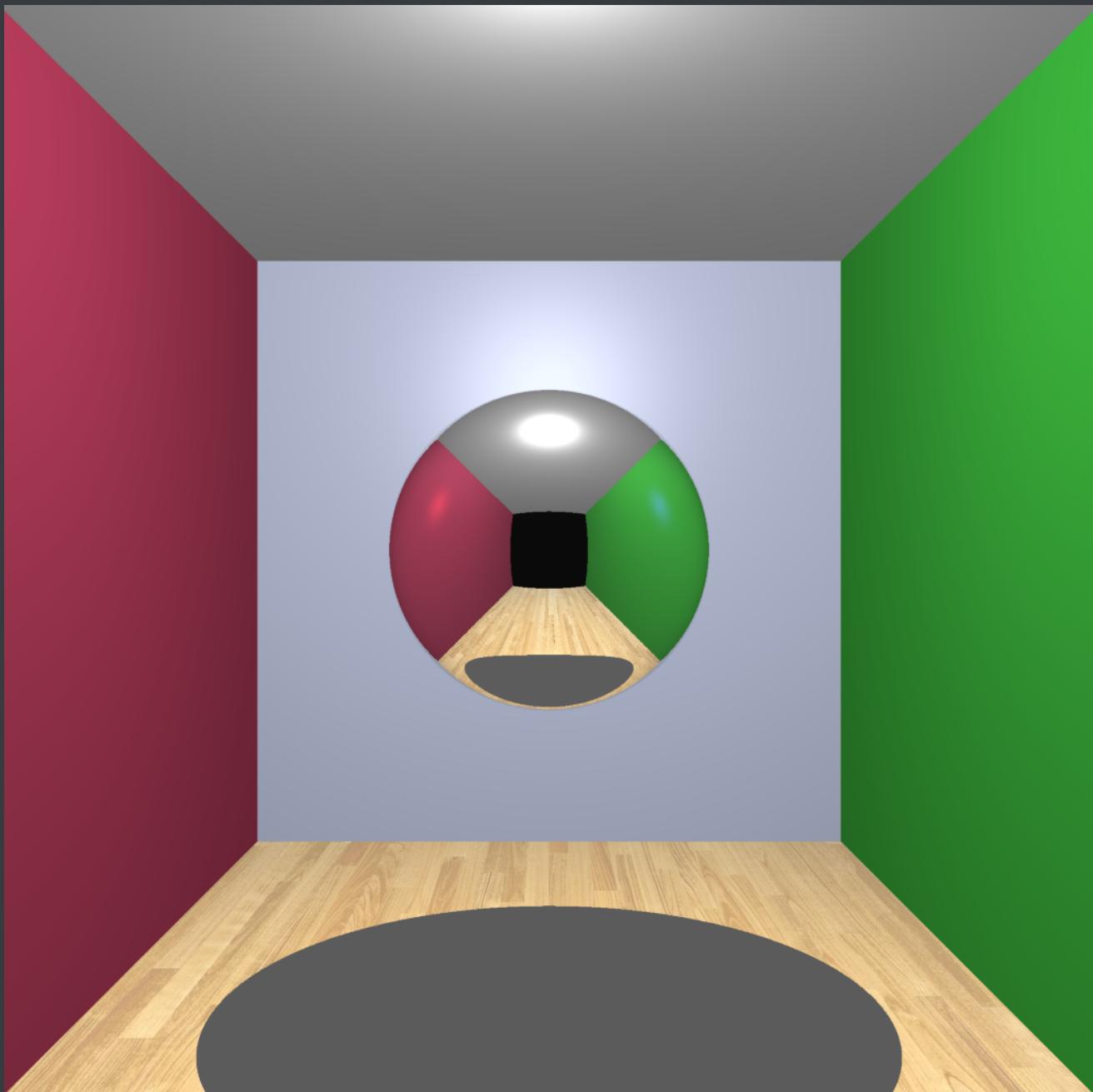
Ray Tracer

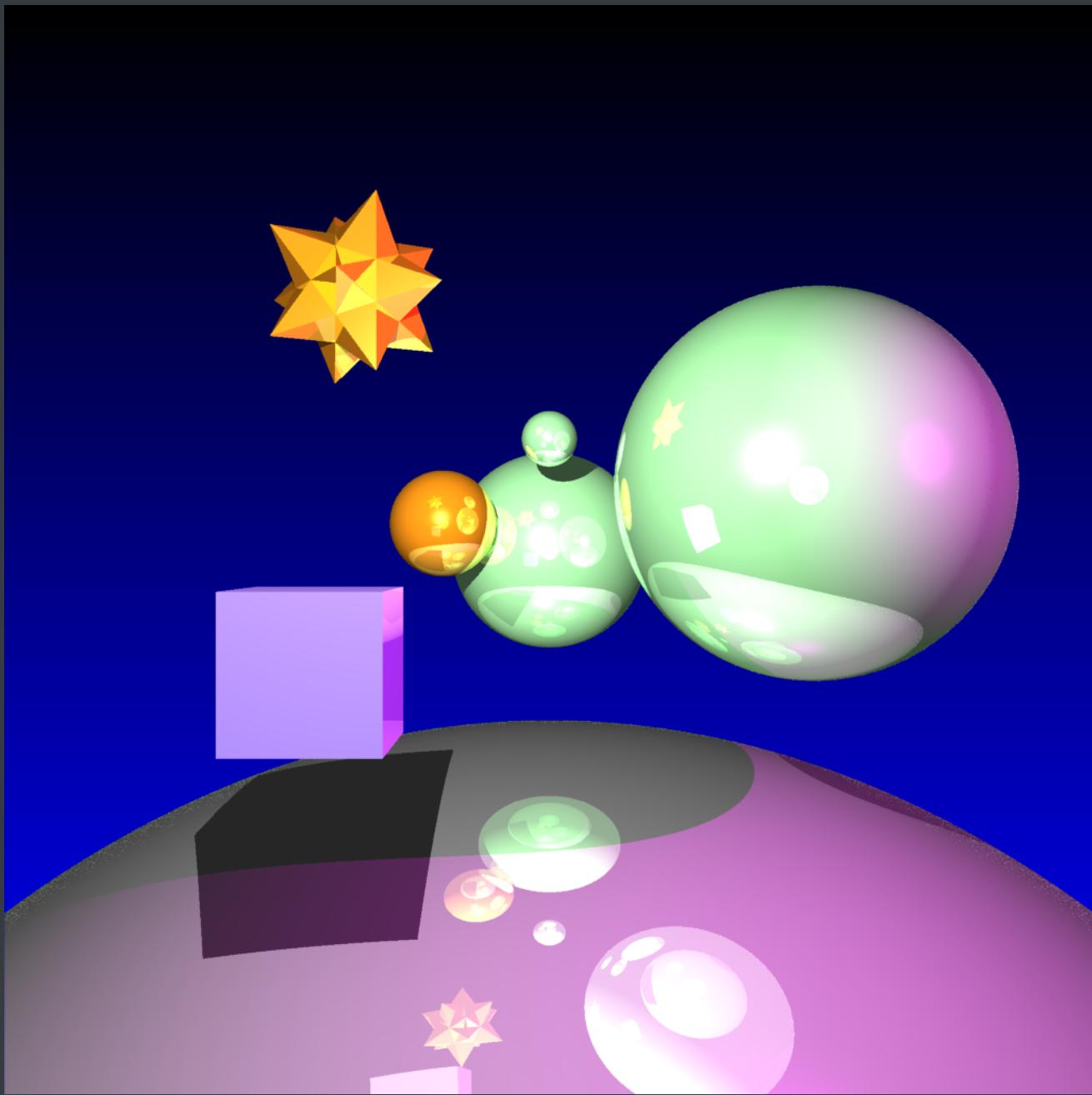
1. Custom primitives (Cone, Cylinder, Torus)



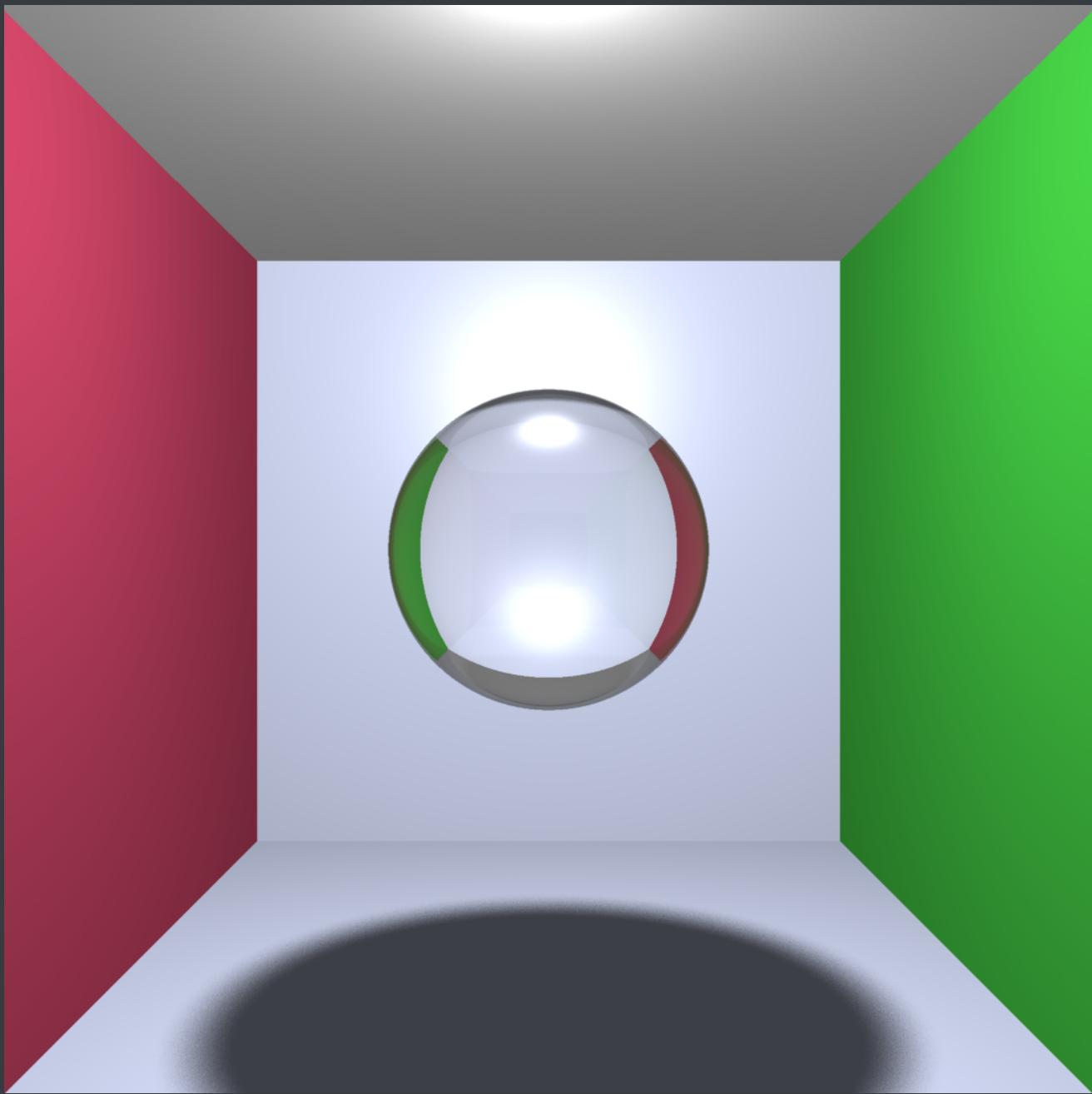
- Torus was not in the revised objectives

2. Mirror Reflection

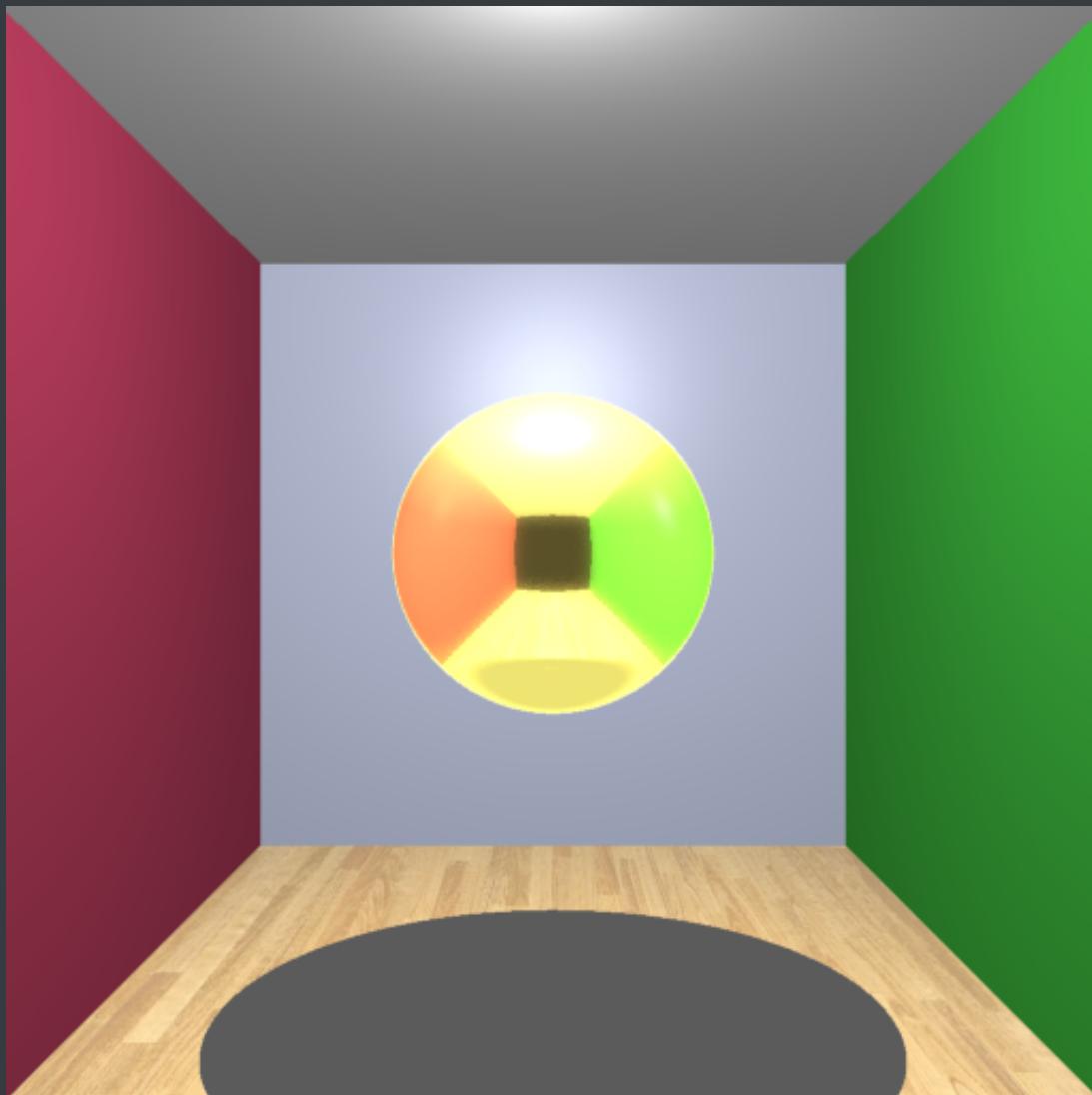


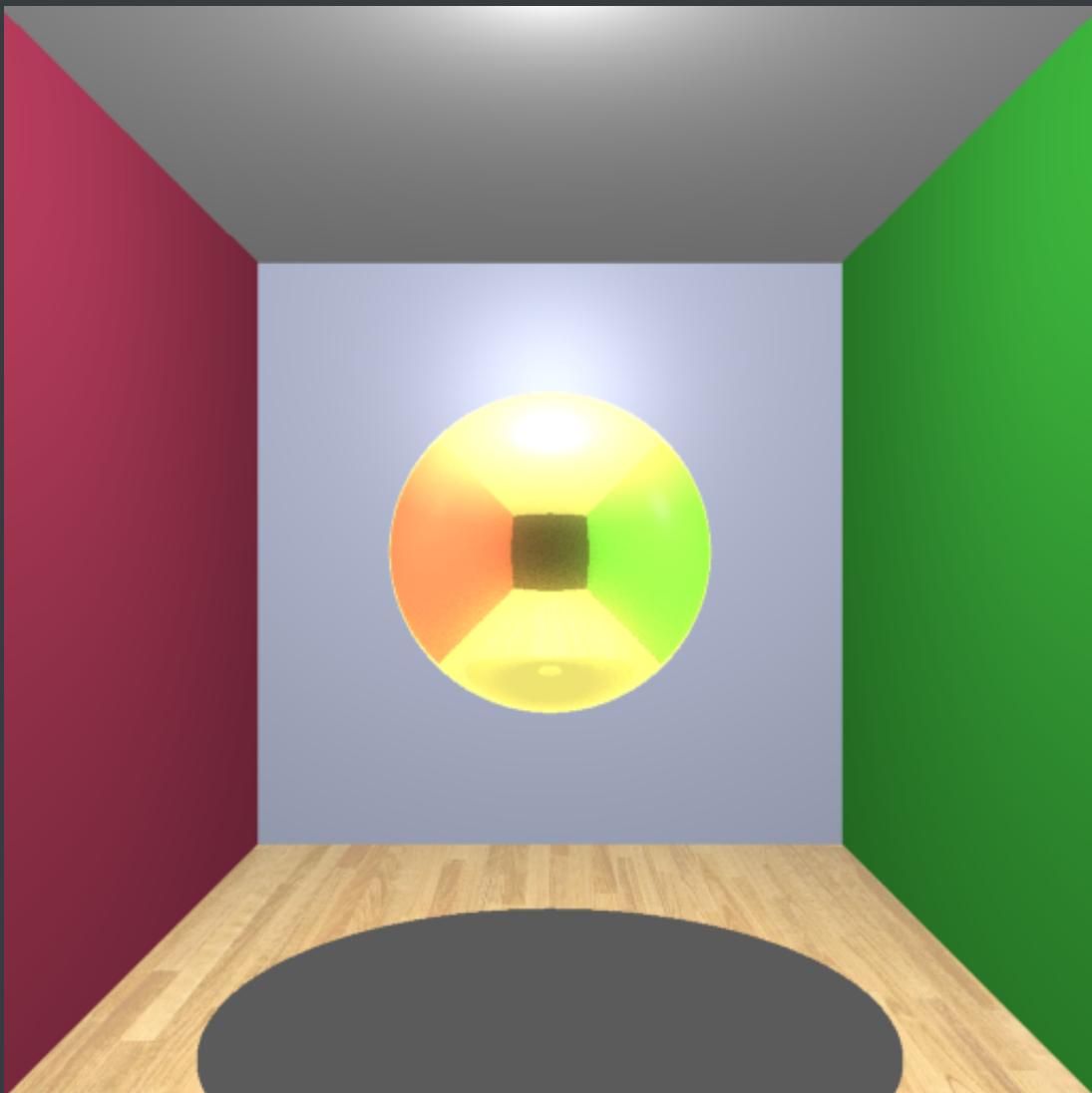


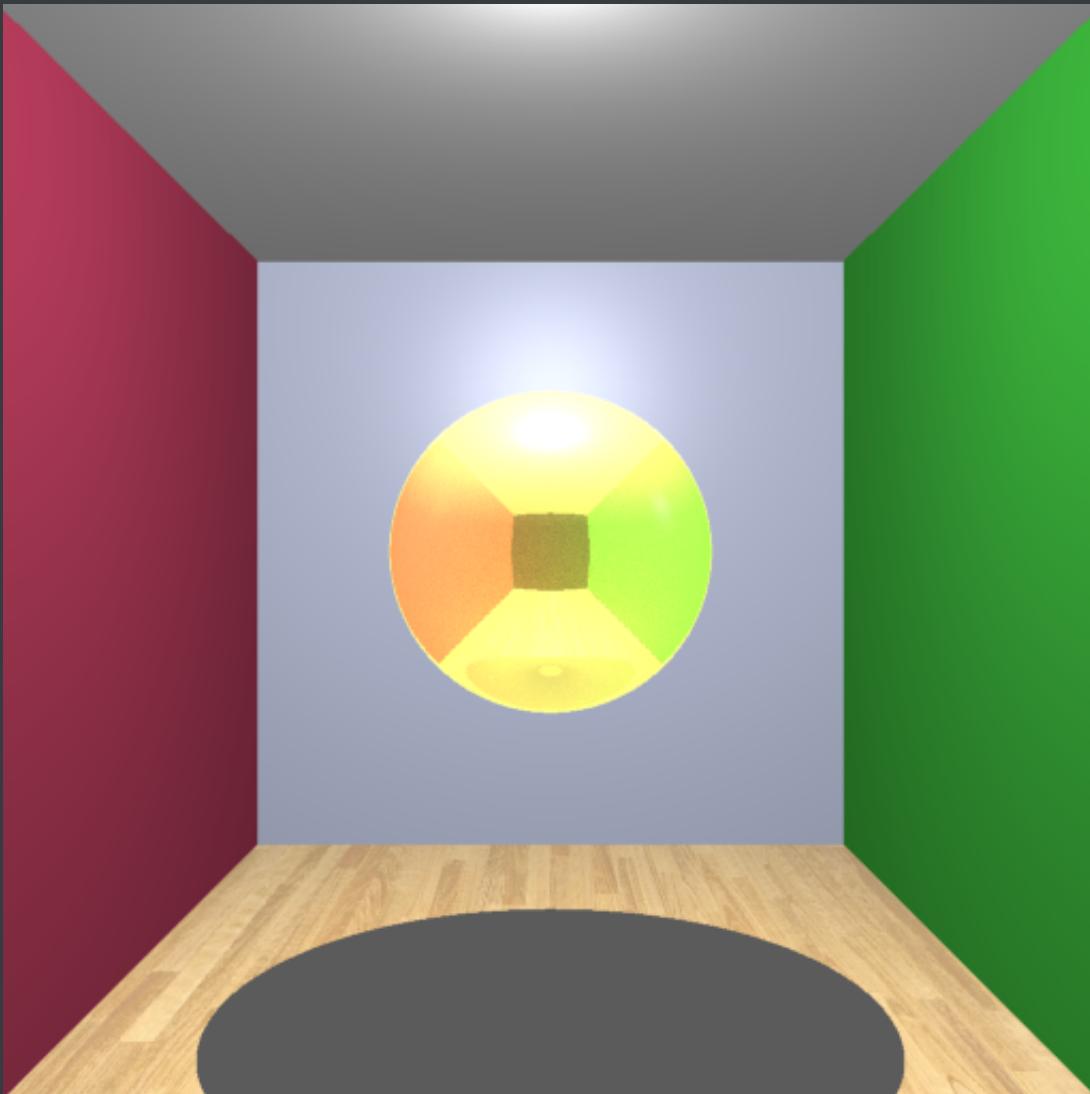
3. Refraction



4. Glossy Reflection

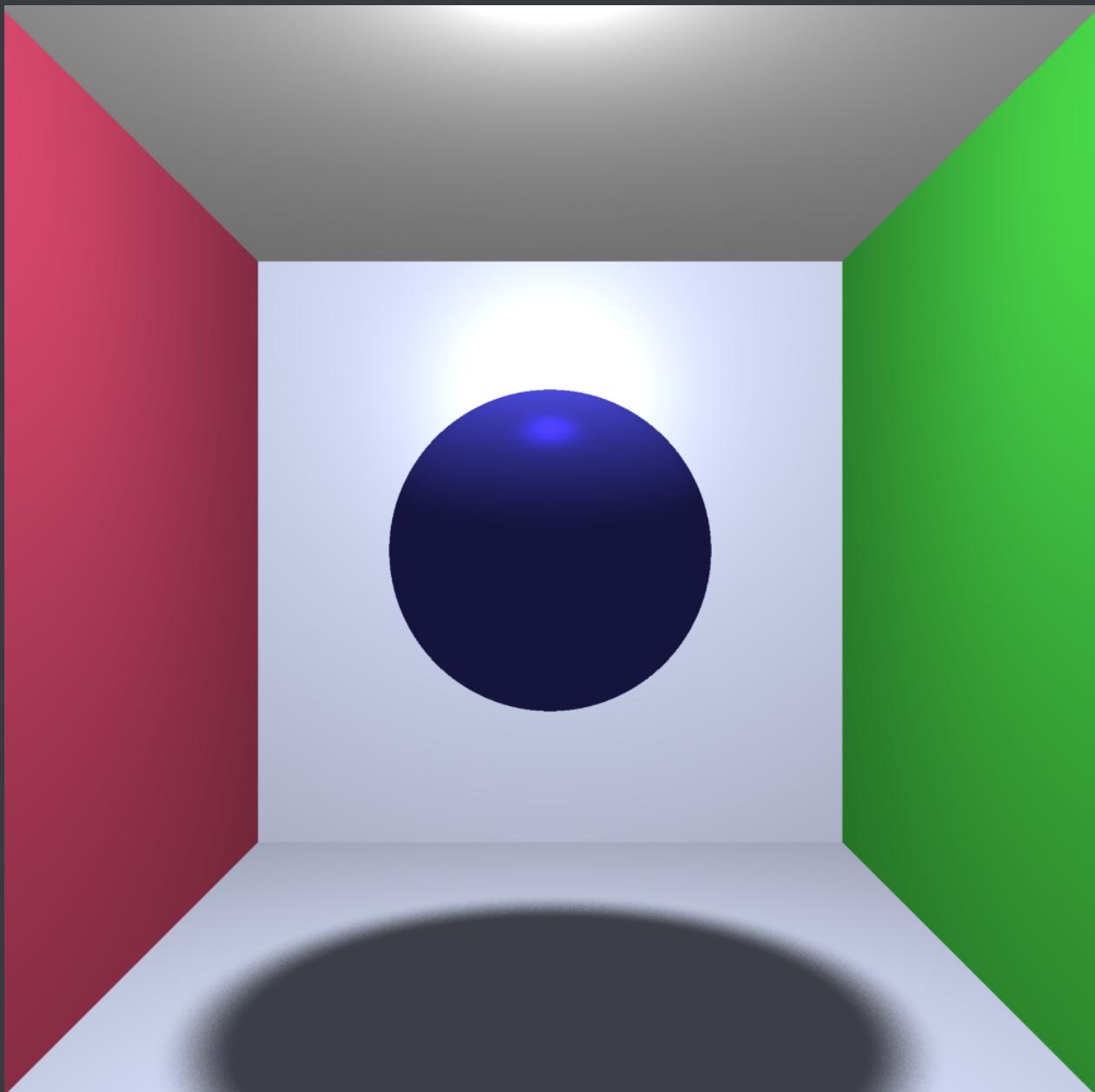


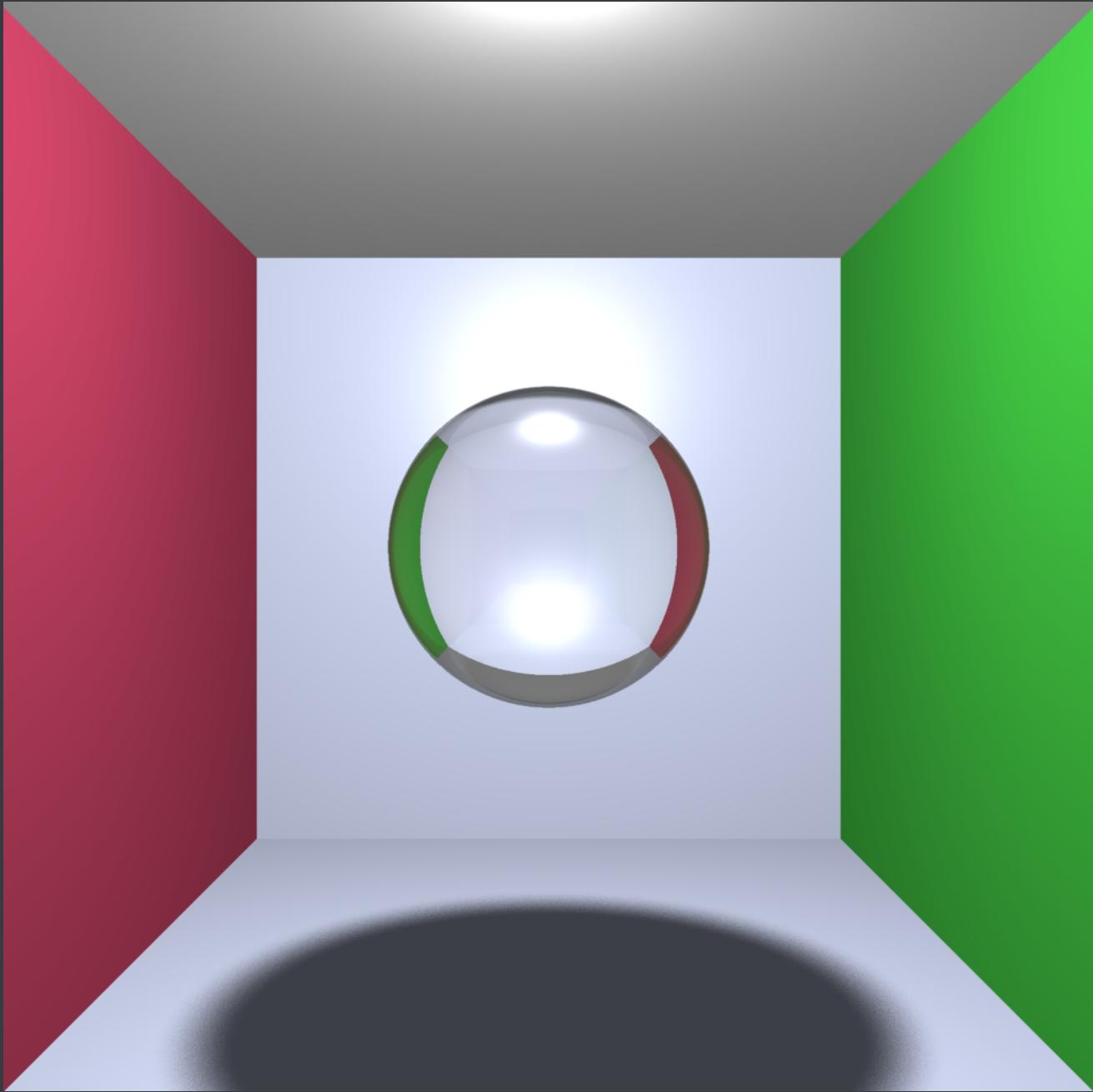




- Images with glossy coefficient from high to low

5. Soft Shadow





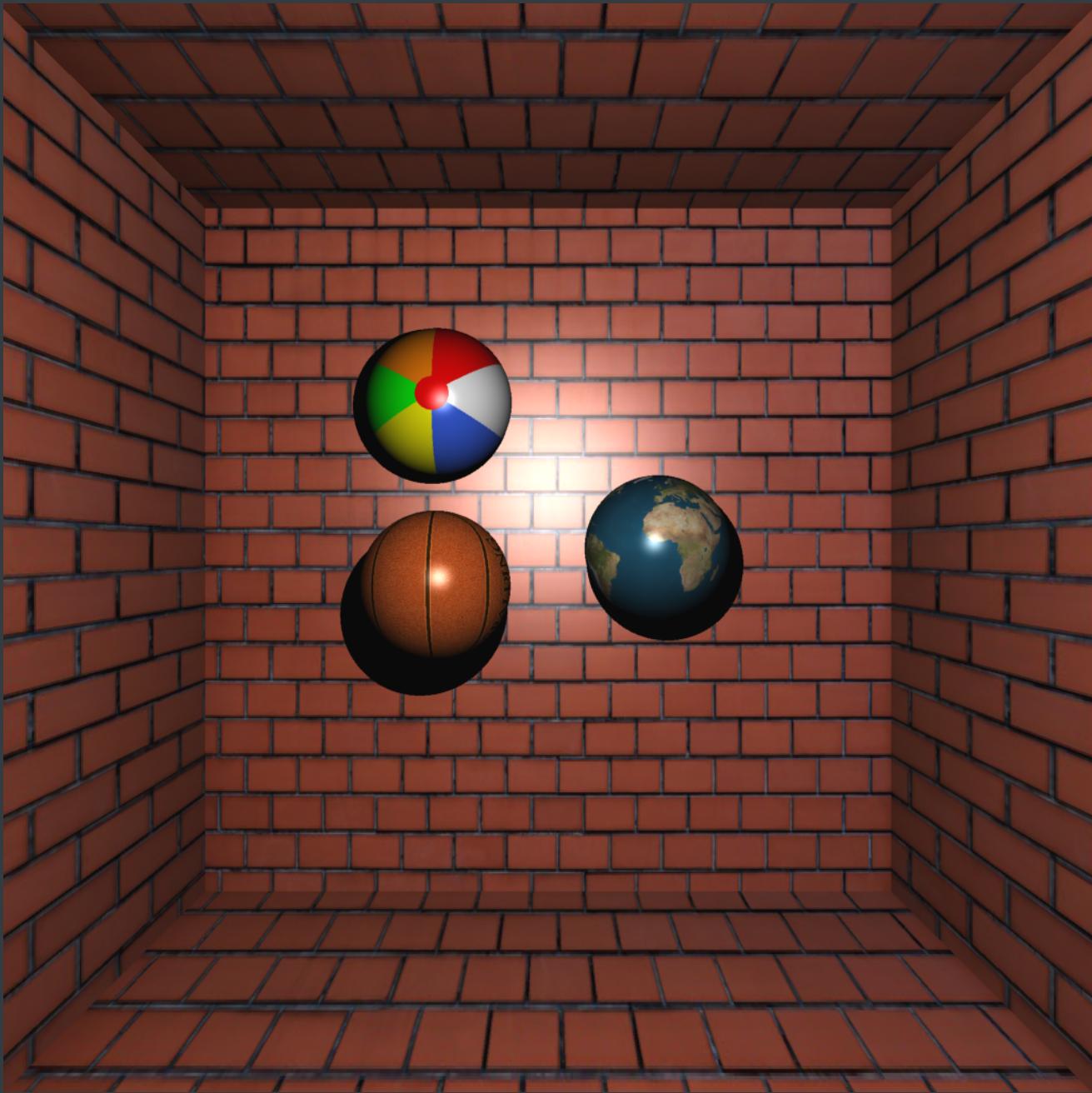
- Since there isn't a photon mapping, shadows for transparent object can't be simulated

6. Depth of field



7. Texture Maps





- texture mapping for spheres and surfaces, and bump mapping is working somewhat but not really.

Final Scene









- Due to the limit of my machine's processing power and lack of optimization, I was not able to render a scene with every feature enabled in time. Here are a few with different feature enabled.