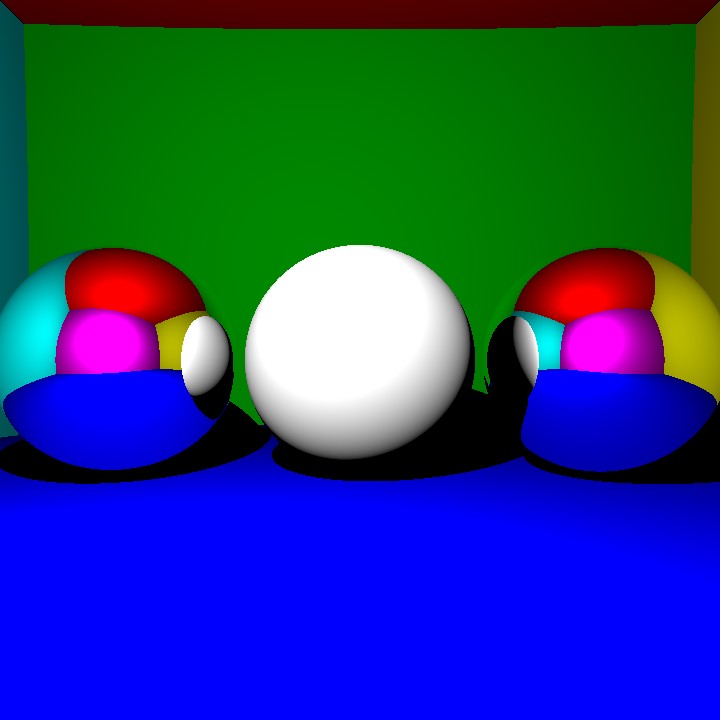
Carolina Lopes | CSE306 | Spring 2020

Ray-tracer

CSE306



*Disclaimer: Basis of code up to and including reflection were copied from Guillaume Loranchet. This was in order to aid me since I did not have a strong knowledge of C++ and was struggling to begin. All work from Refraction onwards is my own.*

*A close up of a green field

Description automatically generatedA close up of a ball

Description automatically generatedA close up of a mans face

Description automatically generatedA picture containing purple, sitting, ball, green

Description automatically generated*

# Mirror – reflection

# A picture containing sitting, light, ball, drawing Description automatically generated

Figure : Light intensity 105

# A picture containing graphics, drawing Description automatically generated­

Figure : Light intensity 2.1010

# Transparency – refraction

A picture containing light, ball, drawing

Description automatically generated

Figure 3: Transparency without code to impede rays from entering the sphere

A picture containing light, drawing

Description automatically generated

Figure .1: Transparency

# Hollow Spheres

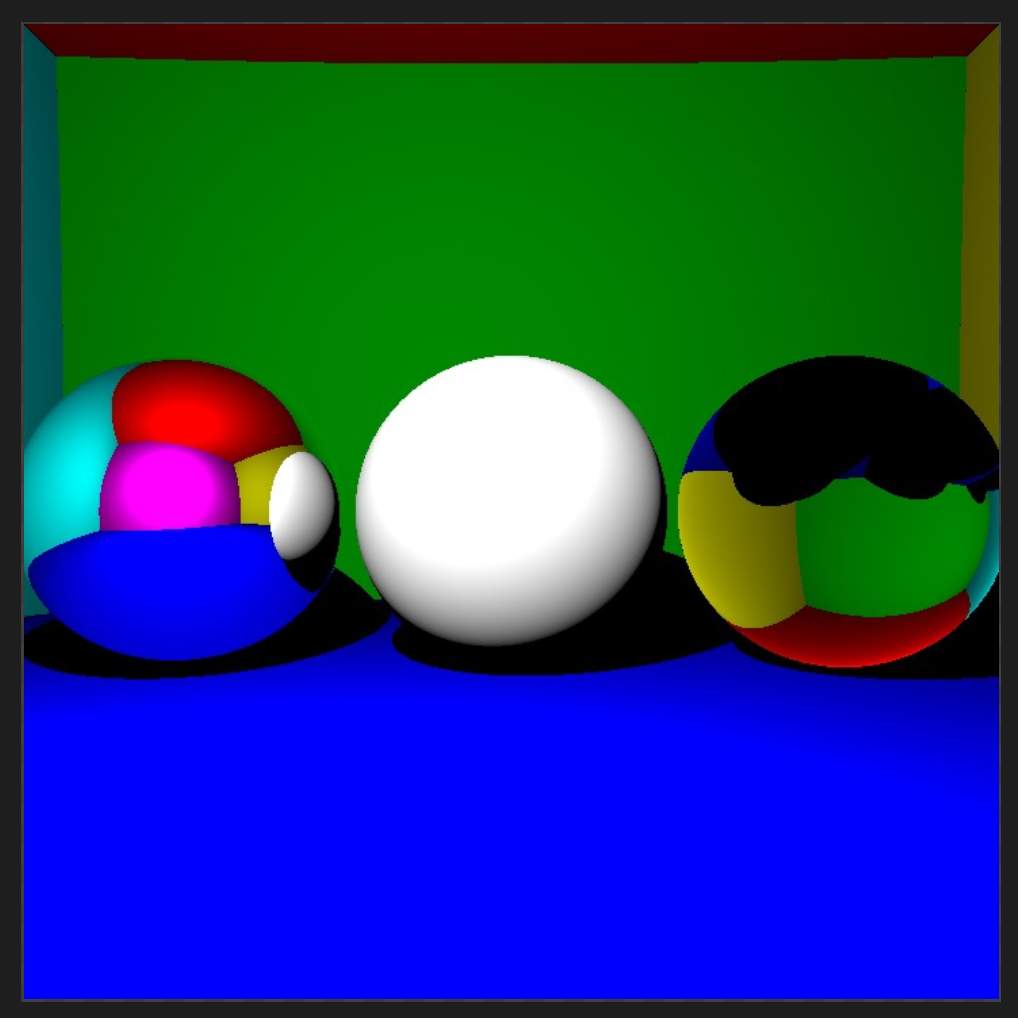


Figure : add a hollow circle inside, no flip of normal

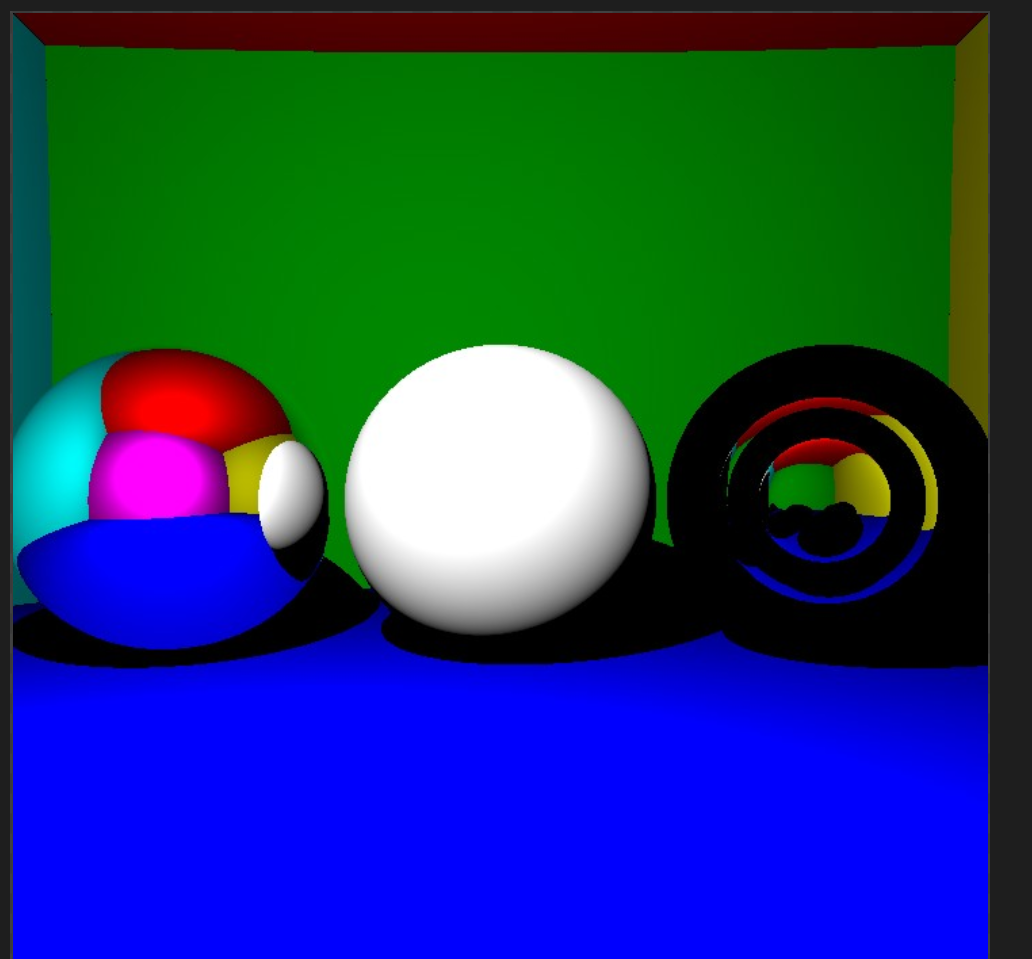


Figure : Sphere\_right and sphere\_right\_hollow both set to hollow

A picture containing drawing

Description automatically generated

Figure : max path length 2

A picture containing sunglasses

Description automatically generated

Figure : max path length 10

# Fresnel Law