

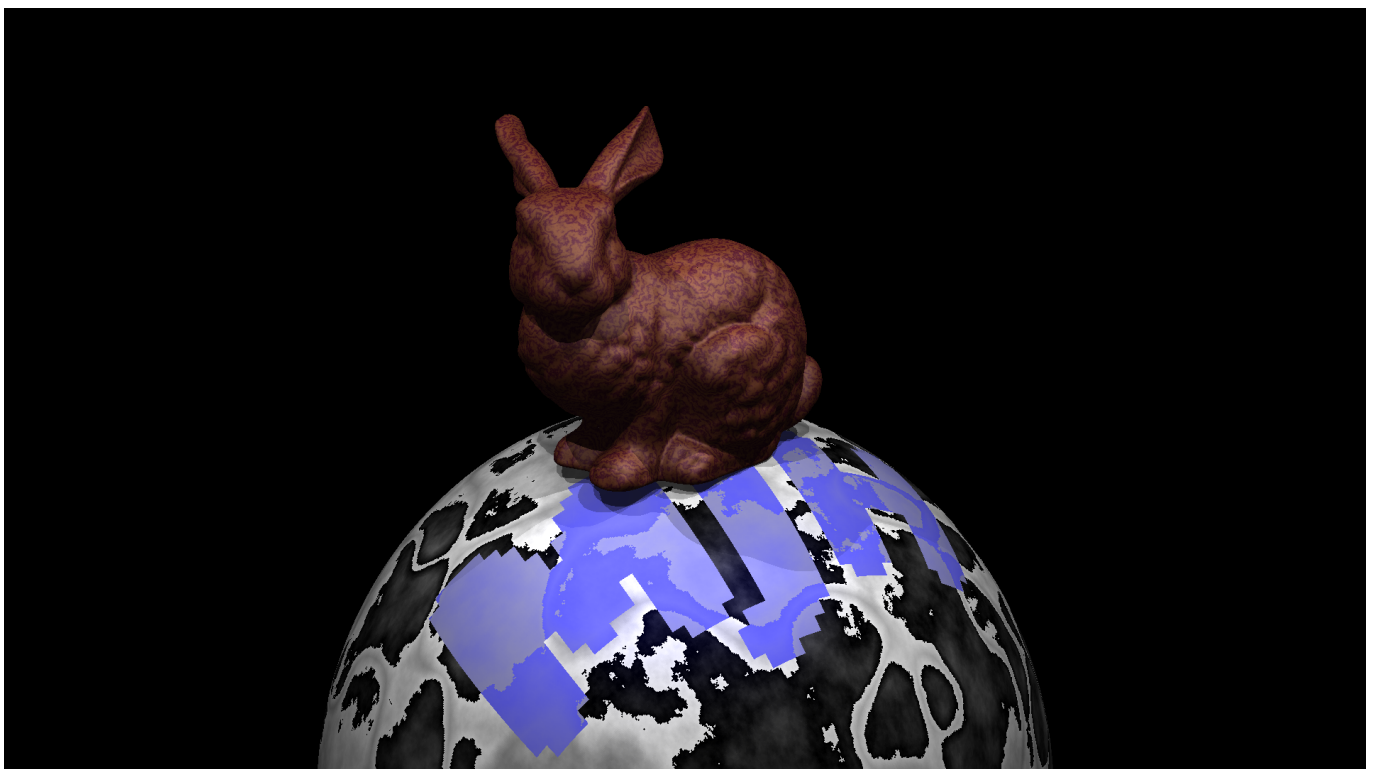
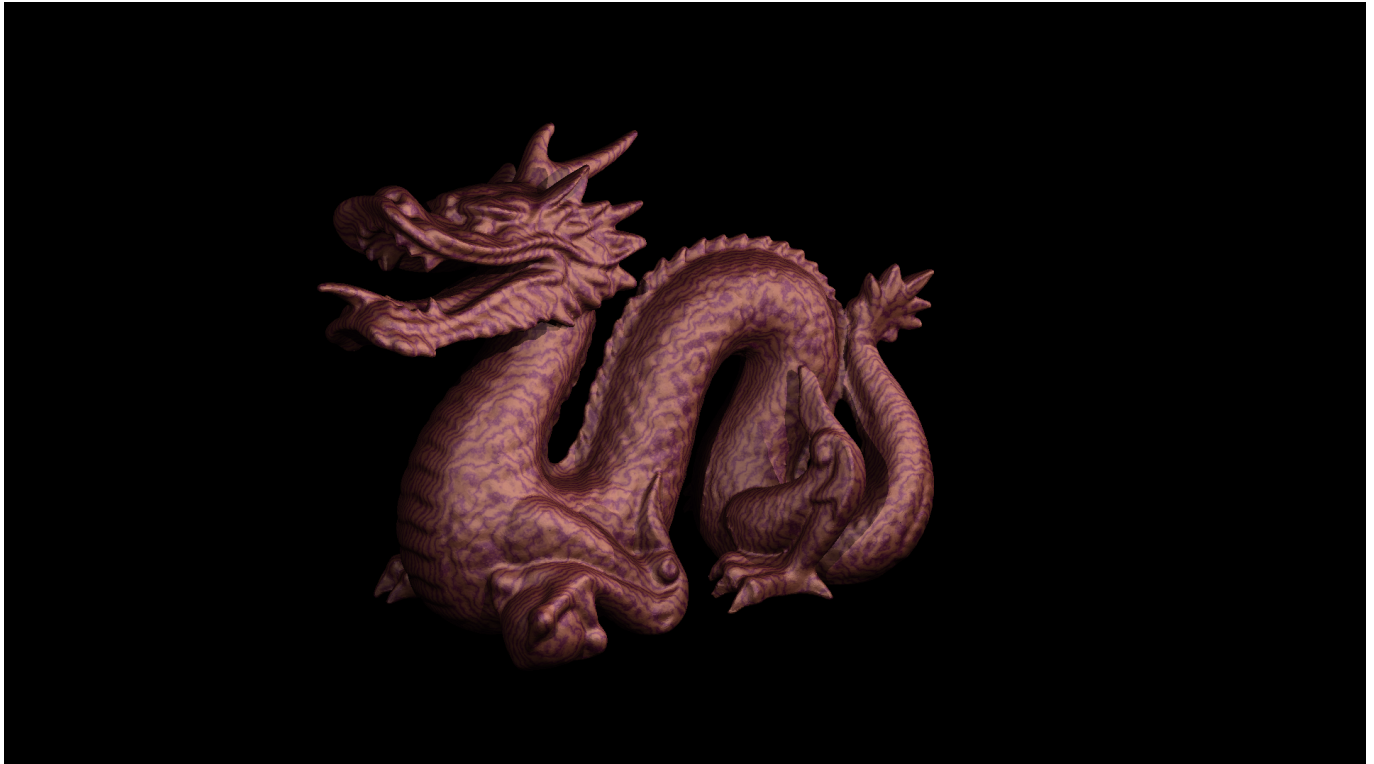
Raytracer

Author: Mason John Hawver

Class: CSCI 5607

Gallery

hw1c showcase img (./showcase_hw1c.png):



Compiling and Running

Compiling and Running on Linux-x86: (If not use the use the corresponding programs on your system)

```
cd <path to hw1c.mason.hawver>
make all
./raytracer1c <input file name> <optional: output file name>
```

Example Usage:

```
./raytracer1c ./assets/scenes/hw1b.in ./hw1b.ppm
feh ./hw1b.ppm #view image

./raytracer1c ./assets/scenes/hw1b.in
feh ./assets/scenes/hw1b.ppm #view image
```

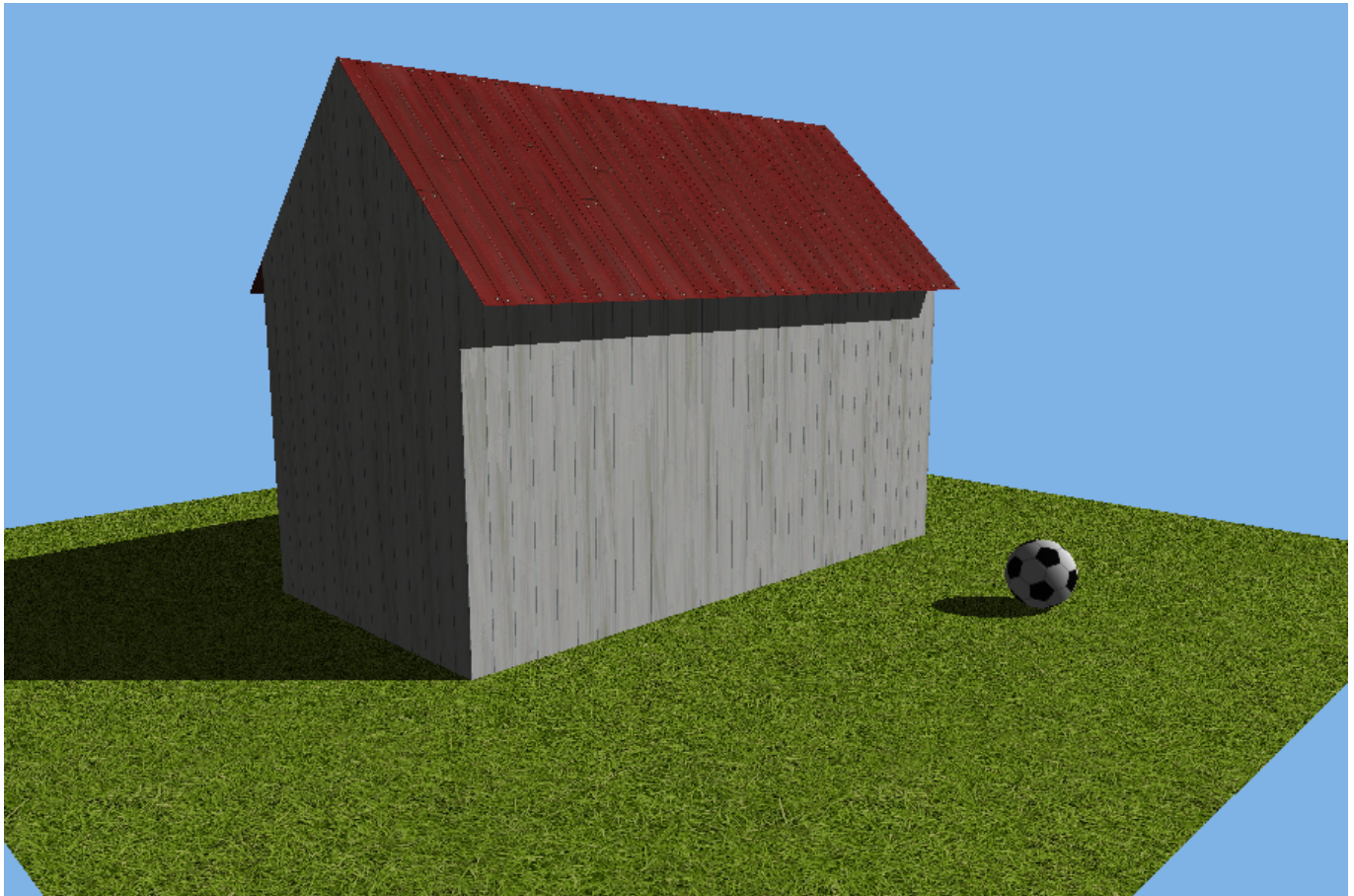
Code Structure

- ./include -> stores header files, the header files are commented so go there for additional documentation.
- ./include/core -> headers for core data structures, io, and parsing
- ./include/math -> headers for vectors, rays, spheres, perlin noise, and common math functions and structures
- ./include/resources -> headers for image and scene loading and saving
- ./include/raytracer -> headers for ray casting, shading, and a bvh
- ./src -> stores source files for each header file, it mirrors the structure of ./include
- ./ -> stores main functions and Makefiles, README.md, and raytracer1b

less important:

- ./assets -> a bunch of files
- ./bin -> all programs generated so far
- ./tests -> my unit tests

HW1c Writeup



The reference Image for this scene was notably distorted compared to mine; I'm assuming there is something wrong with your code. The scene file for this is in `./assets/scenes/hw1c.in`.

The scene files for the two showcase images: `./assets/scenes/bunny2.in` `./assets/scenes/dragon.in`