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**Compiler / Environment / Platform Used:** GCC, macOS, Visual Studio Code (VS Code)

**Number of late days used:** 1

**Fully Implemented:**

1. [Ray::Camera::drawOpenGL](#)
2. [Ray::ShapeList::drawOpenGL](#)
3. [Ray::TriangleList::drawOpenGL](#)
4. [Ray::Triangle::drawOpenGL](#)
5. [Ray::Sphere::drawOpenGL](#)
6. [Ray::Material::drawOpenGL](#)
7. [Ray::DirectionalLight::drawOpenGL](#)
8. [Ray::PointLight::drawOpenGL](#)
9. [Ray::SpotLight::drawOpenGL](#)
10. [Ray::AffineShape::drawOpenGL](#)
11. [Ray::Box::drawOpenGL](#)
12. [Ray::Cylinder::drawOpenGL](#)
13. [Ray::Cone::drawOpenGL](#)
14. [Ray::Torus::drawOpenGL](#)
15. [Ray::Camera::moveForward](#)
16. [Ray::Camera::moveRight](#)
17. [Ray::Camera::moveUp](#)
18. [Ray::Camera::rotateUp](#)
19. [Ray::Camera::rotateRight](#)
20. Vertex buffer objects for [Ray::TriangleList](#) (already implemented)

**Partially Implemented:**

1. [Ray::Texture::initOpenGL](#) (commented out – was giving an OpenGL error)
2. Vertex Buffer objects for [Ray::Sphere](#) (commented out – was giving an OpenGL error)

**Left Un-implemented:**

1. Vertex Buffer objects for remaining shapes
2. Other tasks (E.g. full scene anti-aliasing, etc. )

**Other:**

Generate a `.ray` file describing a room scene with:

1. Four walls, a floor and ceiling.
2. A table, several chairs, etc. You may choose more interesting furnishings.

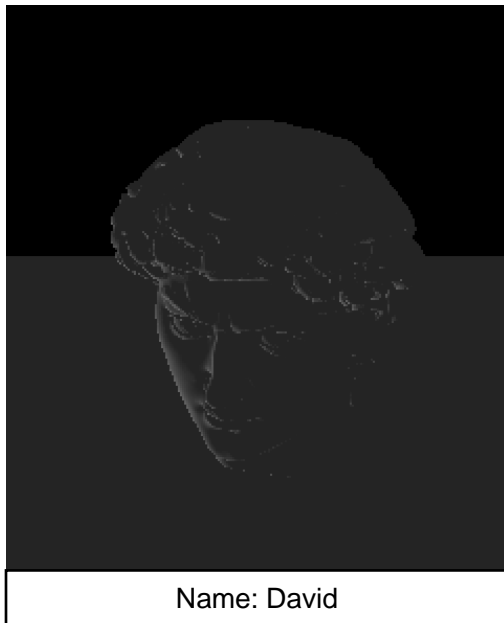
3. At least one transparent surface, perhaps the table top.
4. At least three texture mapped surfaces, each with a different texture.
5. At least three point or spot light sources.

Path to .ray file: Assignments/Static3D/**art3.ray**

Image for art contest (/agupt110\_HTML/agupt110.art.Submission1.jpeg).

Note: The .ray file for art contest (/Assignments/Static3D/art3.ray) also makes use of other .ray files (chair.ray, table.ray, additional\_objects.ray).

### Art Contest:



To generate the image:

.ray file used to generate the image is Static3D/david.ray. The image looks dark for some reason because of directional light. I tried using point light but it gives a darker rendering. I didn't implement accelerated ray tracing in Assignment 2, so this rendering seemed impressive enough.