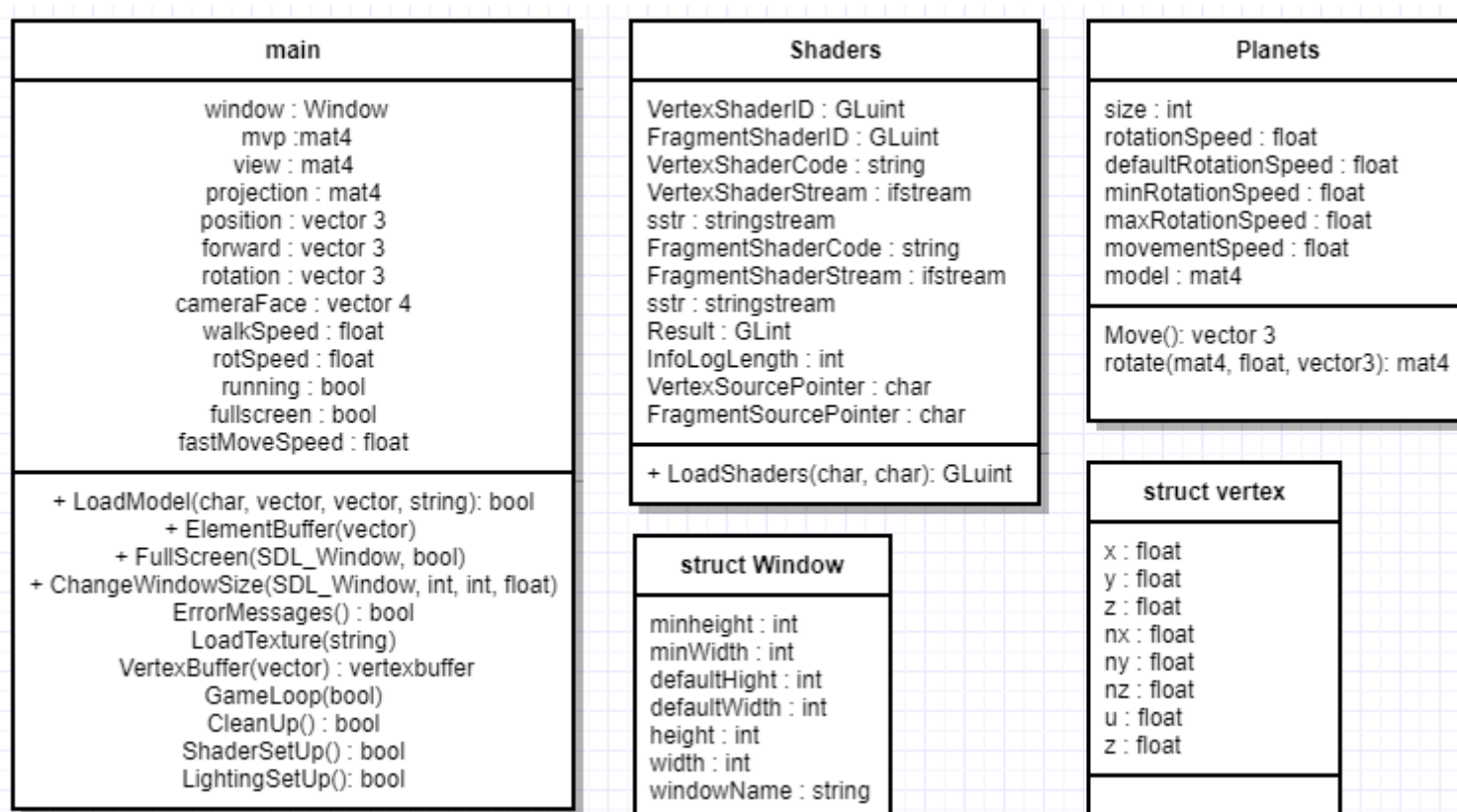
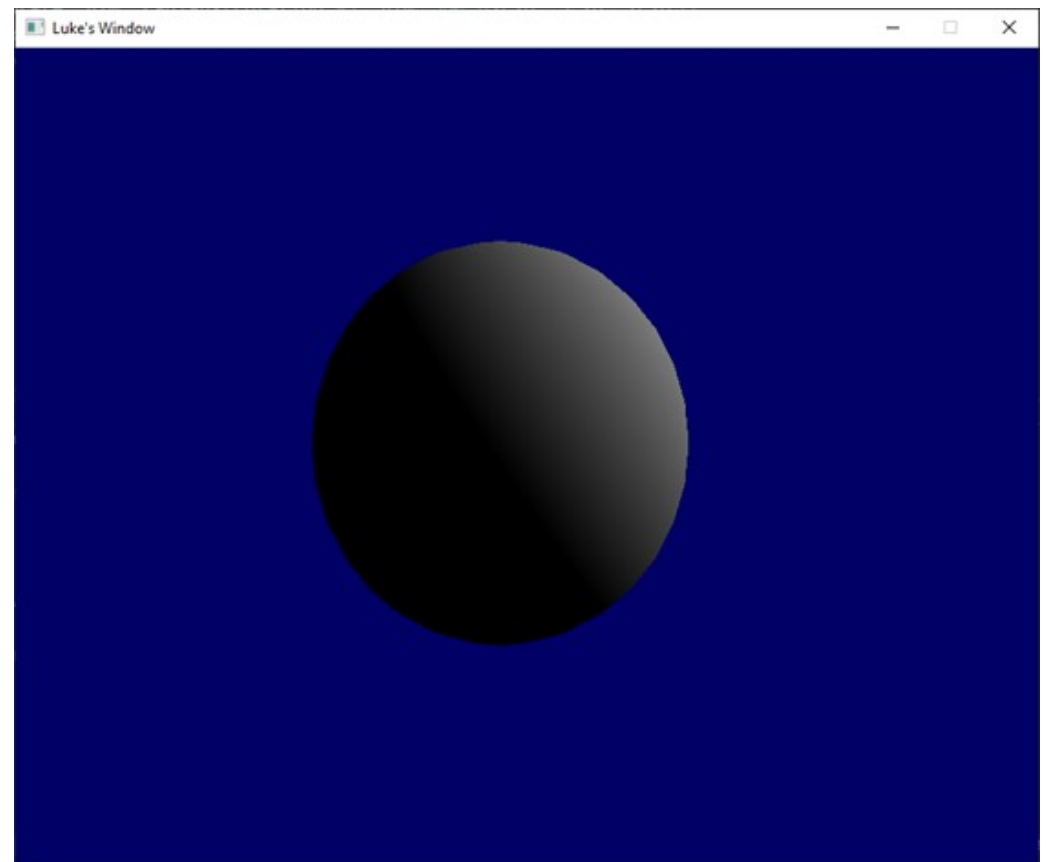


Orbiter 2

Luke Ryan

The Problem: Space is such an interesting part of our world but very few games delve into the science of planets in a solar system. As such I am going to make a simple simulation of a basic solar system. **The Issue:** To develop our understandings of space and our solar system, through a simple simulation. Allow others to make their own custom solar systems.

Solution: Using mathematical functions that take in the weight/gravity of the planet and the speed that it is traveling at. These values are then used to calculate the direction and speed the planet travels at. This calculation would have to be checked over to make sure a complete a full orbit of the central star is preformed by the planet. Using matrix transformations the planets slowly rotates. Basic lighting is also emit from the central start as well.



Not sure what to add here, may add pseudo code here?

Positives: All planets share a class so it is easy to add more planets. **Improvements:** Variations to the planets: gas giants, ringed planets and ocean planets. More orbiting bodies such as moons, asteroids and meteors. Lastly different central bodies such as binary stars, black holes and trinary stars.