Moon Phases

Can be seen at <http://charlestoy.com/threejs/>

The Idea:

I wanted to create an outer space environment of some kind. So focused more on the moon. I wanted to show the different phases of the moon while having it orbit the earth and the sun.

Some Methods:

Idea was not to do an exact model.

I created a sphere in Three.js and change the width and height segments in the geometry tab to make sure it looks like smooth sphere. Applied a moon texture to the moon in the material tab. Then applied script to cause the moon to spin on its y axis

I created another sphere the same way to make the earth. While also adding a earth texture to the sphere and having it spin on its y axis a bit faster then the moon.

Earth spins faster then the moon due to the perspective camera. It will spin around the moon. Its hard to tell if the earth is moving when the camera is spinning as well.

The sun is in place for the light source and doesn’t move using a point light source.

I also in compassed the system inside a large sphere and placed the star map inside it.

Jupiter is also orbiting.

Goal:

Was to be able to jump from planet to planet and to have moons orbiting the other planets but it was laggy and sometimes things would just disappear for no reason