

CS 550 Final Project Proposal
Sun-Earth-Moon-Mars System
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Introduction:

The goal of this project is to create a Sun-Earth-Moon System.

Requirement:

- It involves 2D computer graphics - the orbits of the planets.
- It involves four 3D computer graphics (spheres of Earth, Moon, Mars, and Sun).
- It involves textures for all four 3D computer graphics.
- It involves lighting from the Sun.
- Centered on the sun, the earth and Mars goes around the sun and rotates on their axis.
- The moon goes around the earth and turns on its own axis.
- The speed of revolution and rotation will be accelerated to the point where it is visible to the naked eyes.
- The radius of the sun would be reduced to a tenth of its actual size.
- Will scale the orbital periods.
- Treat orbits as circular.
- Good outside viewing so that viewers can see everything at the beginning.
- Point-light lighting from the Sun.
- One viewing option, watching the moon's animation only. (Since the Sun may be too big and too close).