Shreya Anand

Section 12

EGR 115 Project Proposal

Orbit Simulation

The title of my project is orbit simulation. The purpose of this simulation is to show the orbits of a user described planet by calculating the orbit based on its characteristics. The user will be asked to input into a GUI the mass of the planet and its distance from the sun. The simulation will show the orbit of the planet in a 2D animation until the planet crashes into the sun, flies off screen, or the user ends the program. While the planets will not be to scale, the orbit, as indicated by a dotted line, will be mathematically accurate. There will be text boxes to input the mass and distance from the sun and a button to end the program. I chose this project because I think it is flexible and can be made more complex or simpler depending on the workload. I also really enjoy space and physics, so this subject is very interesting to me.