

Final project proposal

Topic: Rocket Simulation

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Project Plan:

The goal of our project is to simulate a rocket. The title of this project is Rocket Simulation, presented by Malhar Singh (100829423) and Paul Gabriel Katigbak (100752553). We plan to start with a rocket launching from the surface of the Earth (or maybe other planets). This rocket can then either simulate escaping the planet's atmosphere or orbit the planet depending on the velocity. This may include rigid body calculations, however, instead of this, we might try a circular satellite detaching from a rocket and orbiting the planet instead of a single rigid-body rocket. We might also try and compare how a rocket launch might be different when launched from different planets. This simulation features things such as thrust, drag, gravity, and some rigid body (depending on the simulation aspects chosen).

Another option we thought of is using a spin launcher (spinning catapult) to generate enough speed to propel a mass and have it orbit around the planet.