

Project Title:

Rocket Launch Analysis Tool

Team Members:

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Project Description:

A program where the user can input some of the following: amount of fuel, desired orbit, payload size, number of stages, etc.

It will then use those conditions to calculate the other requirements.

e.g: The user states that a single-stage liquid oxygen/hydrogen rocket needs to send 500kg into LEO from Kennedy Space Center. The computer then outputs how much fuel would be needed, possible orbit inclinations, etc.

A key feature would be that it doesn't require the user to define all the parameters. For example, if the user wants to know the total structural weight of a rocket, the program doesn't need to know the launch site location to answer that question.

Of course, the finished project will be much more complex with multiple stages, more possible parameters (inputs) to define, and what aspect(s) of the rocket to analyze (output).

Desired Presentation Date:

Thursday, April 25 at the earliest because some group members will be at an AIAA DBF competition the weekend prior to the presentation.