Report for the NASA

- Findings for the time the height of the rocket: Drag force is the principal contributing factor of why my code gave 74km instead of 70, we shall approximate the drag force, unterdstanding the aerodynamics of the rocket. More than 94% accuracy.

- The time it took to burn has over 98.5% accuracy, this is because we are considering the rocket to have a perfectly constant fuel burn rate, which chemically is imposible, physical system of where the fuel is being burned and how must be further investigated if more precise calculations are needed.

- Note that the moon, and earth are approximate as perfect spheres. (Have perfect round sphere form) . Furthermore Gravity as a value of 9.8 is a consequence of this, but more data of gravity at the launch platform must be taken into account.

- The moon position function with time must be used with further data of the moon position, and its orbit arround earth. This is for future use of Apollo going towards the moon.

- Further Solar system objects must be added to the Potential, and force functions to make sure Gravity from these contribute less than 1% otherwise, the altitude, and time might be off by a big factor.

- Shape of the rocket as a perfect point mass, different parts of the rocket feel different amounts of gravity due to the center of gravity of these parts, I doubt the center of gravity is at the center of the rocket, and consideration of highspeed winds like jet streams, creating torque and a angular momentum would not hurt.

- Lastly, logical physical quantities like temperature or pressure, may affect the physical sistem of the rocket, so we must make sure that we do a better job at considering what could make the rocket diffe from our calculations.

To have over 90% accuracy is a starting point, but there's a long road ahead with many more things that would increase our mission succesrate, let yourselves embrace this next challenges, as it is us writing history for the future of the human race. .