

Project Title

Mini Rocket Body – SolidWorks Beginner Project

Objective

The objective of this project was to learn basic SolidWorks modeling tools and workflow by creating a simple aerospace-inspired component.

Software Used

- SOLIDWORKS (Student Version)
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Model Description

The model represents a simplified rocket body consisting of:

- A cylindrical main body
- A revolved nose cone
- Additional revolved geometry at the base
- Filleted edges for smooth transitions

The design is conceptual and intended for CAD learning purposes, not aerodynamic optimization.

Features Used

- Sketch
- Boss-Extrude

- Revolved Boss/Base
 - Fillet
 - Circular Pattern
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What I Learned

- How to create and constrain sketches
 - How to use Extrude and Revolve features
 - How to avoid sketch errors during revolve
 - Understanding feature order in the FeatureManager tree
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Future Improvements

- Cleaner geometric transitions
- Assembly of multiple parts
- Basic simulation and analysis