The animation will show two rockets flying through the air with fire coming out of the bottom. The rockets will move across the screen and appear as if they are launching or traveling through space. The fire will animate continuously to simulate thrust.

Each rocket is made up of:

- Cone (top)
- Body
- Fins
- Fire (thrust)

The animation will demonstrate hierarchical modeling because each rocket is built from smaller components that move together as one object.

Harris

Objects: Rocket Body and Cone

- The cone will be a triangular top piece.
- The body will be a long cylindrical or rectangular shape.
- The cone will sit on top of the body.
- These objects will be grouped so transformations apply properly.

Steven

Objects: Rocket Fins

- Two or three triangular fins attached to the lower sides of the body.
- Fins will be positioned symmetrically.
- They are child objects of the body so they move with the rocket.

Advaiith

Objects: Fire Animation

- Fire will be drawn using triangles or curved shapes.
- It will animate by scaling up and down repeatedly.
- The color may shift between red, orange, and yellow.
- The fire will be attached to the bottom of the rocket body.

Hierarchical Class

If the rocket moves, all child objects move with it.

If the body rotates, fins and fire rotate with it.

Fire animation is local to the rocket.

Each rocket is its own hierarchy instance.

Object Appearance Details

Rocket 1

- Red body
- White cone
- Gray fins
- Orange/yellow animated fire

Rocket 2

- Blue body
- Black cone
- Dark gray fins
- Red/orange animated fire

The functions we will be using are

- display()
- update()
- animate()

Each rocket is its own object instance built from smaller component classes.

The main animation loop updates and displays each rocket.