Lunar Lander Planning

A simple game made with Javascript and p5.js.

Land the vehicle safely on the ground without colliding with any obstacles.
You control the levitation/thrusters with the spacebar or with the arrow keys.

Content:

- The game have at least 3 different states/screens:

  1. A start screen
  2. A game screen/The actual game
  3. Game over screen --> have the ability to restart the game from this screen

- Vehicle can move <u>up and down</u> with up-arrow and/or spacebar on keyboard.
- Vehicle can move from <u>side to side</u> with the right-arrow/left-arrow keys.
- Obstacles move from the right to the left side of the canvas.
- Vehicle falls to the ground because of gravity --> velocity is not linear.
- Vehicle goes up when clicking the up-key or spacebar.
- If vehicle collides with obstacles || ground, the game is over.

Rough build order:

- Create the canvas
- Create variables:
    - state = "", to track what screen is currently active.
    - buttonIsPressed = false;
- Create objects for:
    - The values --> x, y, velocity, acceleration, etc.
    - The keyboard inputs - key-arrow/spacebar.
- Draw the background (with a function).
- Draw the obstacles (with a function for each obstacle).

- Create x#(3) of obstacles (use an array?)?

- Draw the vehicle (with a function).

- Add gravity to the vehicle
- Make the vehicle fly/control its x, y position.
- Detect collision between ground / the obstacles and vehicle and determine the win/loss.