Product Backlog aka Priority List

1. User Interface (Must-Have)

- **Game UI**
  - Characterized player ('Bucky').
  - Buttons for movement.
  - Three lanes for navigation.
  - Animations for:
    - Collisions
    - Start
    - Finish
    - Lane switching

- **Acceptance Criteria:**
  - The player character ('Bucky') is visible and identifiable.
  - The game has **buttons for movement** that respond to input.
  - The game has **three lanes** for navigation.
  - The game includes animations for:
    - Moving between lanes.
    - Colliding with obstacles.
    - Starting the game.
    - Finishing the game.

- **Menu System**
  - Start button.
  - Quit button.
  - Display the player's top 5 scores.

- **Acceptance Criteria:**
  - The menu displays a **Start** button that begins the game.

- The menu displays a **Quit** button that exits the game.

- The menu shows the **Top 5 player scores** when available.

- The menu layout is clear and accessible.

2. Core Gameplay Mechanics (Must-Have)

- **Timer System**

  - Display a countdown timer on the screen.

  - Timer decreases as the game progresses.

  - Timer pauses when the game is paused.

  - Timer negatively iterates by (x) when hitting an obstacle

- **Acceptance Criteria:**

  - The timer is visible on the game screen.

  - The timer starts counting down when the game begins.

  - The timer pauses when the game is paused.

  - The timer stops when the game ends.

- **Obstacles**

  - Moving obstacles that reduce time on collision.

  - Different obstacle models for variety.

  - Potential difficulty scaling for obstacles.

- **Acceptance Criteria:**

  - Obstacles appear on the screen while the game is active.

  - Obstacles move in a set or randomized pattern.

  - Colliding with an obstacle decreases the timer.

  - Different obstacle models exist in the game.

  - Obstacles may have varying difficulty levels.

3. Optional Enhancements (Nice-to-Have)

- **Settings Menu**

  - Adjust difficulty, volume, or other game settings.

- **Acceptance Criteria:**

  - The settings menu exists and can be accessed from the main menu.

  - Players can adjust at least one game setting (e.g., sound, difficulty).

- **Custom Cars**

  - Option for players to select different cars.

- **Acceptance Criteria:**

  - The game allows players to select different cars before starting.

- **Tutorial**

  - Guide to help new players learn controls and mechanics.

- **Acceptance Criteria:**

  - A tutorial mode exists that explains controls and mechanics.

  - The tutorial can be skipped or exited at any time.