

## **Sprint Breakdown (4 Weeks)**

### **Sprint 1: Planning & Research (Pre-Development)**

- **Game Architecture & Design**
  - Create a game flow diagram showing screen transitions and game states.
  - Design a basic layout for UI elements.
- **Obstacle & Car Research**
  - Gather reference images for obstacles and cars.
  - Decide on different obstacle types and possible difficulties.
- **Technology & Setup**
  - Ensure the game frame works properly in a web environment.

**Goal:** A clear game structure, UI wireframes, and reference materials for visuals.

### **Sprint 2: Basic Gameplay Implementation**

- **Game Loop & Timer**
  - Implement a countdown timer that updates in real-time.
  - Add pause/resume functionality.
- **Basic Player Movement**
  - Allow the player ('Bucky') to move between three lanes.
- **Obstacle System (Static First)**
  - Implement basic obstacles that appear in the game.
- **UI Foundation**
  - Create a simple menu with Start and Quit buttons.

**Goal:** A playable prototype where the player moves and sees a timer.

### **Sprint 3: Interaction & Visuals**

- **Obstacle Behavior**
  - Make obstacles move across the screen.
  - Implement collision detection with obstacles.
- **UI Enhancements**
  - Display the timer and score properly.
- **Basic Animations**
  - Add animations for game start, collisions, and movement.

**Goal:** Core mechanics work with a basic UI and animations.

### **Sprint 4: Polish & Extras**

- **Scoring System Finalization**
  - Implement and store the player's top 5 scores.
- **More Visual Improvements**
  - Add different obstacle types and animations.
- **Bug Fixing & Testing**
  - Perform final debugging and playtesting.

**Goal:** A playable, polished version with scoring and refined visuals.