# **Sprint Breakdown (4 Weeks)**

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

## Game Architecture & Design

- Create a game flow diagram showing screen transitions and game states.
- o Design a basic layout for UI elements.

#### Obstacle & Car Research

- Gather reference images for obstacles and cars.
- o Decide on different obstacle types and possible difficulties.

### Technology & Setup

- o Ensure the game frame works properly in a web environment.
- Ensure proper setup with Source control

**Goal**: A clear game structure, and reference materials for visuals, frame of the game in browser, source control setup.

# **Sprint 2: Basic Gameplay Implementation**

## • Game Loop & Timer

- o Implement a countdown timer that updates in real-time.
- Add pause/resume functionality.

### Basic Player Movement

o Allow the player ('Bucky') to move between three lanes.

### Obstacle System (Static First)

o 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

- o Make obstacles move across the screen.
- Implement collision detection with obstacles.

### • UI Enhancements

Display the timer and score properly.

#### Basic Animations

o 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

o Implement and store the player's top 5 scores.

#### More Visual Improvements

Add different obstacle types and animations.

### Bug Fixing & Testing

 $_{\circ}$   $\;$  Perform final debugging and playtesting.

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