#### **Game Instruction Manual**

#### Introduction

Welcome to the ultimate test of skill and strategy! This game challenges players to navigate a ball through a dynamic world filled with obstacles, weather effects, and power-ups. Your goal is simple: survive as long as possible and achieve the highest score. Each difficulty level offers unique gameplay mechanics to keep you engaged and test your abilities.

Whether you're playing casually or competing for a spot on the leaderboard, this guide will help you understand the game and its features.

# **Objective**

The objective of the game is to guide your ball through a series of obstacles and survive for as long as possible. Avoid collisions with walls, adapt to weather effects, and use power-ups strategically to enhance your chances of success. Players can compete on three difficulty levels-Easy, Medium, and Hard-and aim for a position on the Top-5 Leaderboard for each level.

# **How to Play**

#### Game Controls:

- Use your mouse to move the paddle across the game screen to control the ball's movement. Navigate the ball through gaps and avoid obstacles to stay in the game.

# **Difficulty Levels**

- I. Easy:
  - No weather effects (no wind or rain).
  - Slower wall speed.
  - Larger gaps between walls.
- II. Medium:
  - Random weather effects (rain, wind, or both).
  - Faster wall speed.
  - Moderate gap sizes.
- III. Hard:
  - Fastest wall speed.
  - Random weather effects (rain, wind, or both).
  - Includes power-ups.

# **Scoring System**

Players earn points based on surviving each wall gap. If you move past a wall gap without hitting them, you gain one point. However, if you hit any part of the walls, you get deducted health. The longer you stay in the game, the higher your score. Only in the hard difficult level you can regain health by powerups based throughout the game when your health gets low.

# *Top-5 Leaderboard:*

- Each difficulty level has its own leaderboard.
- If your score qualifies for the Top-5 Scores, you'll be prompted to save your score with a Username and PIN.
- Scores are updated in real-time, and you can view the leaderboard after each game.

# **Winning Strategies**

- I. Easy Mode:
  - Focus on learning the controls and mastering basic movements.
- II. *Medium Mode:* 
  - Pay attention to weather effects and adjust your movement to counteract wind and rain.
- III. Hard Mode:
  - Use power-ups strategically to overcome the fast-paced environment.
  - Stay focused on small gaps and react quickly to unpredictable weather.

## **Frequently Asked Questions (FAQs)**

## 1. What happens if I crash into a wall?

Your health will decrease and once you see no color in the health bar that means the game is over.

## 2. Can I replay the same level to improve my score?

Yes! You can replay any difficulty level to try for a higher score.

# 3. How do power-ups work?

Power-ups provide temporary health boost, if your ball hits a green circle without hitting a wall then your health increase to almost full health. However, you will only see them if your health gets low in the hard difficulty level.

## 4. What if two players have the same score on the leaderboard?

The player who achieved the score first will remain higher on the leaderboard. However, if the score is one of the lowest top five scores in the leaderboard and there are already five scores included on the leaderboard, the duplicate same score will not qualify for the leaderboard.

# 5.) What happens if I lose my username and/or pin?

Then you will have to enter a new username or pin since this is protype game, we did not create the functionality to restore pin or username based on other users' information, ex.) email address.

# 6.) What happens is the correct format for a username or pin?

The username must be a minimum of 8 characters and maximum of 15 characters. It must be alphanumeric (letters and numbers only, no special characters). The pin must be exactly 6 digits. No field can be left blank, and the following pins cannot be used 23456, 000000, and 11111.

#### **Credits**

I would like to extend my sincere gratitude to **Oguz Gelal** for his insightful article, <u>"The Ultimate Guide to Processing a Simple Game"</u>, published on Toptal. The article provided an excellent foundation for understanding how to create a base framework for a game. My project builds upon the concepts and techniques outlined in the guide, enhancing and expanding them to create a more interactive and dynamic experience.