# Mini Minesweeper Game Design Document

#### Genre:

- 1. Golf
- 2. Puzzle
- 3. Arcade
- 4. Casual

#### **Platforms:**

- 1. Windows
- 2. Android

## **Concept:**

The player controls a golf ball through a procedurally generated Minesweeper level, searching for the cup while avoiding the mines.

The game has lives system. The number of lives are determined by the difficulty chosen by the player. 5 lives for easy, 3 lives for medium and 1 life for difficult.

### **Mechanics**:

## Drag to move:

The player has to drag the ball in the opposite direction to the desired direction. The force on the ball is determined by the how far the player has dragged the ball.

The direction of the ball is indicated by a line renderer.

#### Tiles:

The tiles procedurally generated. The number of tiles is decided by the player in the main menu. The tiles break when the ball hits them with the threshold velocity. The tiles also hide the mines.

#### Mines:

The hazardous mines are hidden under the tiles. When the ball comes in contact with the mines they reduce the ball's life by 1.

#### **Number of mines:**

On breaking the tiles the player will be shown the number of mines in that region. 1 indicating there is a mine nearby and so on.

# Mine Marking:

When the player suspects that there is a mine nearby they can the mark a mine as danger by right clicking on the tile or by long pressing on touch devices.

When the mine is marked the ball cannot break the tile.

The marked tile is indicated by a flag on top of the tile.

#### **Directional arrow:**

The arrow indicates where the end goal is located on the mine field.

# Goal cup:

The cup is the end goal of the game. When the ball hits the cup, the game ends and the player is notified that they completed the level.

## **Hardware Specifications:**

- Windows
  - Windows 10 and above
  - 2gb of ram
  - 500mb storage
- Android
  - Android 10 and above
  - 2gb of ram
  - 500mb storage

## **Credits:**

Team Name: Halo games

Project Name: Mini Minesweeper

**Team Members and Roles:** 

- Lohith Sai
  - Programmer for Ball mechanics
  - $\circ$  UI
  - Particle effects
- Harshith Adepu
  - Mine field generation
  - Lives system
  - Audio system

## **Roll Numbers:**

Lohith Sai - 19101UA018

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