#### **HCL INTERNSHIP – MINI PROJECT**

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IT A-1

## **ABSTRACT:**

## **Online Multiplayer Game(Dots-And\_boxes):**

- → It is a well-known game as Dots-And —Boxes. Which we all played in our child-hood.
- → In a brief, we will take a grid (rows\*columns). We can design our grid however we want using how many rows and columns we want each.
- → And we will create two colours for two players to have unique representation.
- → And the game starts now.

## Walk-through:

- → The code uses an array of size(num-dots-1)\*(num-dots-1) to keep track of the count of marked edges of each box.
- → Whenever player-1 marks an edge around a box, the value of the array associated with that box is decremented by 1 and when it is marked by player 2 it is incremented by 1.
- → Whenever any element of this array reaches a value of -4(or4), this indicates that player-1(player-2) has successfully created the box.
- → The game is concluded when all the edges have been marked.
- → The result screen then displays the winner and the number of boxes marked by each player.

### **Controls:**

- 1. Specify the size of the game.
- 2. Player-1 starts the game.
- 3. Click on edges to mark them.
- 4. If a box is made, it gets shaded with the player assigned colour.
- 5. When all the edges are marked, the result is displayed on the result screen.
- 6. Click on play again to play again.

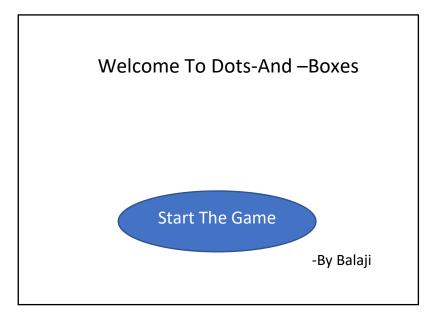
#### **Features:**

- → It is a two player game.
- → First player to get a point wins the game.
- → It is 2-D game.

**Technologies:** HTML, CSS, Javascript.

**Scope:** It is a multiplayer game, the primary aim of this game is to create functional & usable project.

## **Ideation Map:**





# **Work-Flow:**

