

**Group Assignment:
Final Project Proposal**

MEMORY PATTERN LAB

TEAM – CLASS C



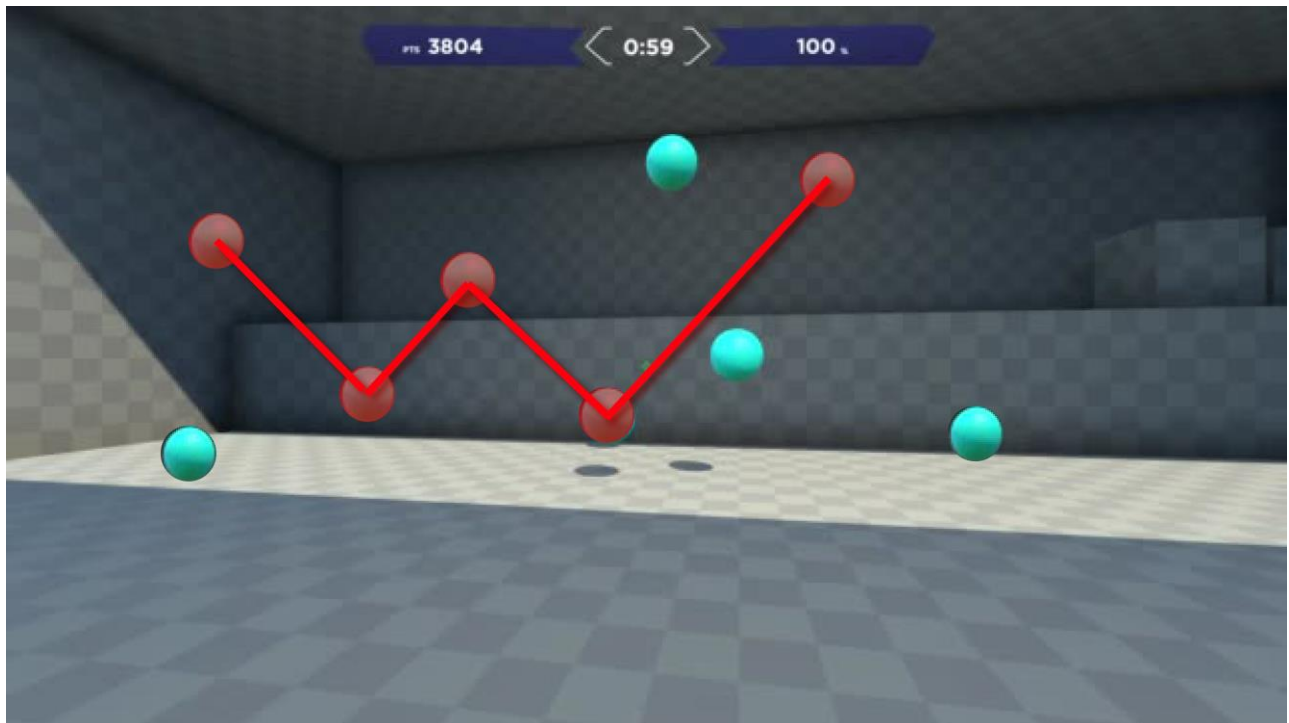
Team Members

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Overview

We are going to make a simple fps game for training our short term memory with the help of patterns. At the start of the game, the user will be given a series of pattern which will be shown by lines and balls in the wall. And then the users have to redraw the pattern to get the right pattern. This game will have a several difficulty based on how many balls and lines are there to remember the pattern or by the amount of time which will be given. Users can also move the camera object to make the 3D application better.

3D Environment Sketch



The picture above demonstrate the 3D environment sketch of our game. We use adaption of AIM LAB environment

Interaction and Technology



User Interaction :

1. User can move the camera by dragging the mouse left, right, top, and bottom.
2. User can press the left mouse button to click the balls for finding the patterns.
3. WASD and Left, Right, Up, Down arrow keyboard key can be used for the users to move.
4. Esc Keyboard key can be used to restart the game.
5. Space Keyboard key can be used to start the timer which indicates that the game started.
6. User can look at the scoreboard and also place their own score after playing the game.

Technology :

1. Three JS
2. WebGL
3. Code Editor Visual Code

Object Dynamic

Local Variable

Local Variables which will be used to develop the game are:

- Wall for the user to see the balls and lines.
- Balls for the user to click the right patterns.
- Lines for the user to drag the right patterns.
- Camera for the user to control the view.

External Variable

External Variables which will be used to develop the game are:

- Three JS Library.
- Database for the scoreboard.
- API to fetch the score from database.