COLOR SWITCH

CSE201: ADVANCED PROGRAMMING

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Implementations and Features

- All scenes have been made through FXML.

- To move Ball, obstacles, Stars and Color changer Animation Timer have been used.

- To move ball upward mouse click have been used and managed from FXML file.

- Load Game menu have been used to save the game states.

- Exit game exits without saving game to save it you have to save it from save button.

- Colour changer and stars have been placed at random intervals.

- The fall of ball is accelerated.

- If you do not have enough stars than you can not revive and get a notification of Not Enough Star.

Design Patterns

- Singleton : One instance of database is good enough for this game.

- Façade : The game is implemented on the basis of menu.

- Iterator : Map entry has been used in HashMap as Iterator.
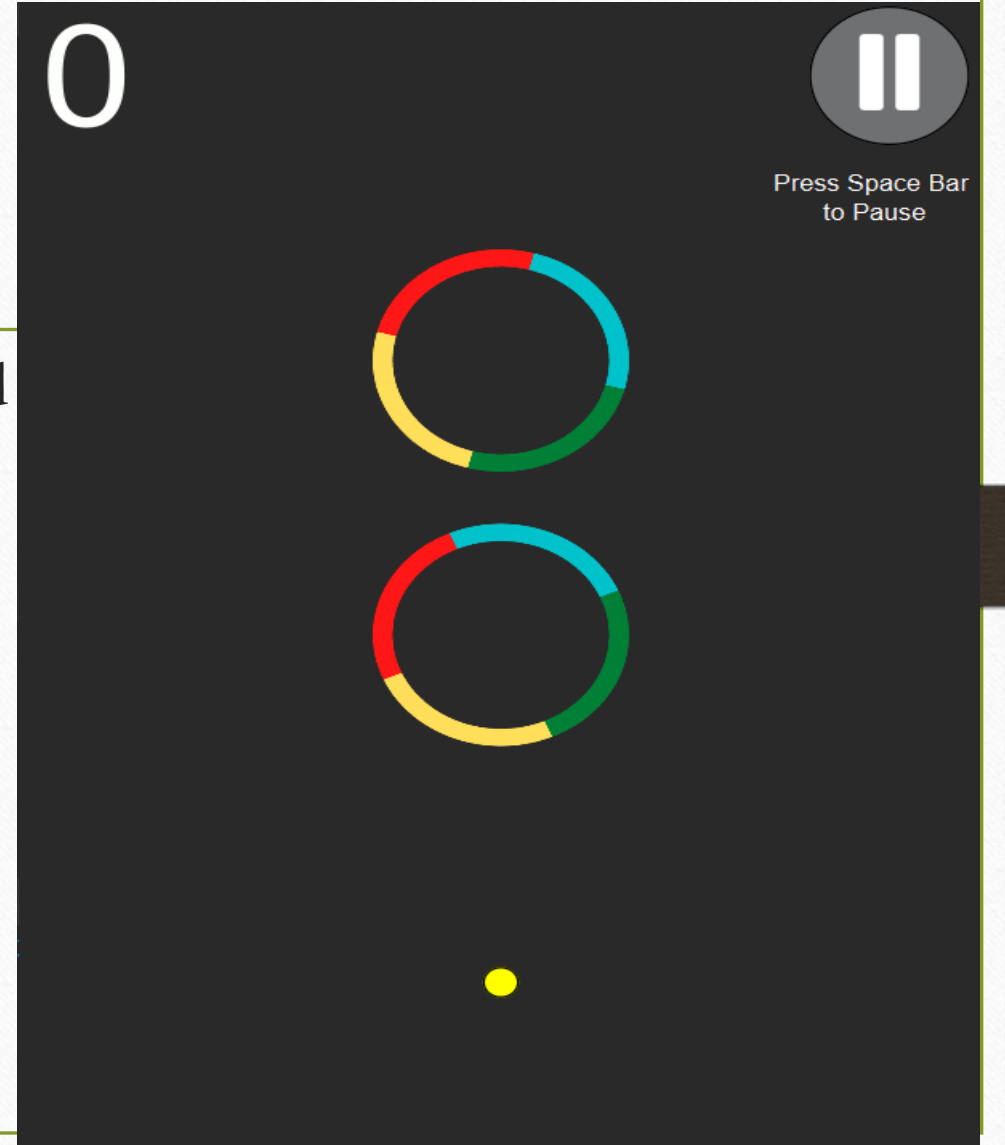
Individual Contributions

- **<u>Vishwajeet</u>**

  ➢ Collision detection

  ➢ Animating the game: Ball movement and obstacle movement.

  ➢ Enabling and stopping animations.

  ➢ UML: Use Case diagram

  ➢ Made Ball class

  ➢ Managed Classroom submission.

  ➢ Reviving of Player.

  ➢ Added Music to game

- **<u>Sourabh</u>**

  ➢ FXML files : Load Game, Main Game, Continue Game, Pause Game, Menu

  ➢ GUI: Buttons, Obstacles, Stars and Color Changer.

  ➢ Serialization: saving game.

  ➢ Deserialization: loading of game and continue option.

  ➢ Managed GitHub.

  ➢ UML: Class diagram.

  ➢ Added bonus pat in game

Bonus Features

1. Added Extra Obstacles : Different Combinations of Obstacles.

2. Added Music in the background.

3. Added a big Star that gives Extra Stars/1 lives as bonus.