KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
INFORMATION AND COMPUTER SCIENCE DEPARTMENT

ICS-108 Project:
Speed Click Game

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1. Project Description:

A. Introduction:

The Speed Click Game is an interactive and fast-paced game where the player's objective is to click falling objects on a board to accumulate points. The game features objects of different values falling from the top of the screen, and the player must quickly click on these objects before they leave the board. The game keeps track of the player's score and displays the top 5 scores once the game is over. It also displays a play again button for the player to keep playing.

B. Features:

a. **Falling Objects:** Objects will fall from the top of the screen and move down, simulating gravity. Each object will have a value associated with it, representing the points that the player will receive upon clicking it. Multiple objects will fall at the same time, with each object being faster than the previous one, increasing the difficulty as the game progresses.

b. **Clicking and Scoring**: The player can click on any falling object to remove it from the board. Upon clicking an object, its value will be added to the player's score. The score will be continuously displayed on the screen during gameplay, allowing the player to track their progress.

c. **Top Scores:** At the end of each game, the top 5 scores achieved by players will be displayed. These scores will be stored on a dashboard, allowing players to see their performance compared to other players.

2. Solution Description:

Following Procedure has been taken place to implement proper functioning of speed click game:

A. Game Initialization:

A game pane is created for the game play area. Additionally, a vertical box is used to display the objects and its values and a score label and play again button is displayed in a horizontal box. Before the game begins the previous top scores will be displayed in a grid pane and also the instructions accordingly. Then upon user reaction, the score will be initialized to zero and will change in real time as the game progresses.

B. Falling Objects:
Creating a class to represent falling objects. Each object has attributes such as value and colour. Then, Generating falling objects at regular intervals, starting with a slower speed and increasing the animation speed after each object gets added to the pane. Each object is assigned a value according to its colour.

C. Click Event Handling:

Click event on the game pane is detected when the player clicks on a falling object. When the click position intersects with any of the falling objects, clicked object is removed from the board and its value is added to the player's score. This is done using the Event driven programming skills.

D. Game Over:

The game will finish after 30 objects have been fallen. Once this end condition is met, the players score will be saved if it is a top score and the top scores will be displayed, and user will be informed of the instructions on how to proceed to play again. The saving process has been implemented using files and lists.

3. Work Distribution:

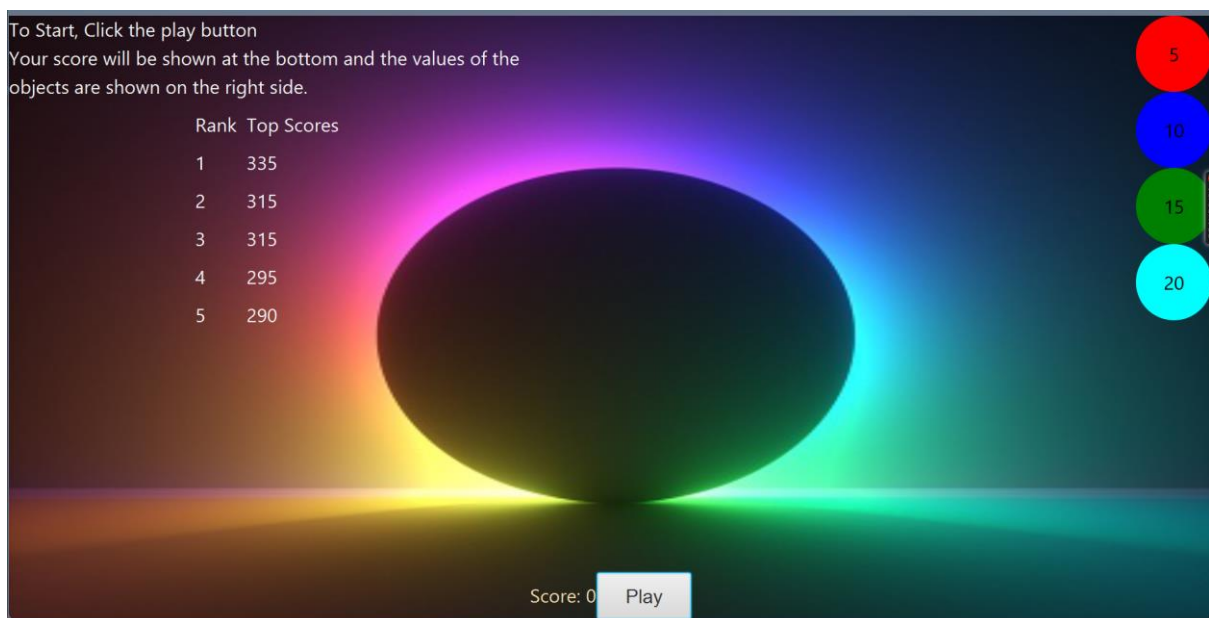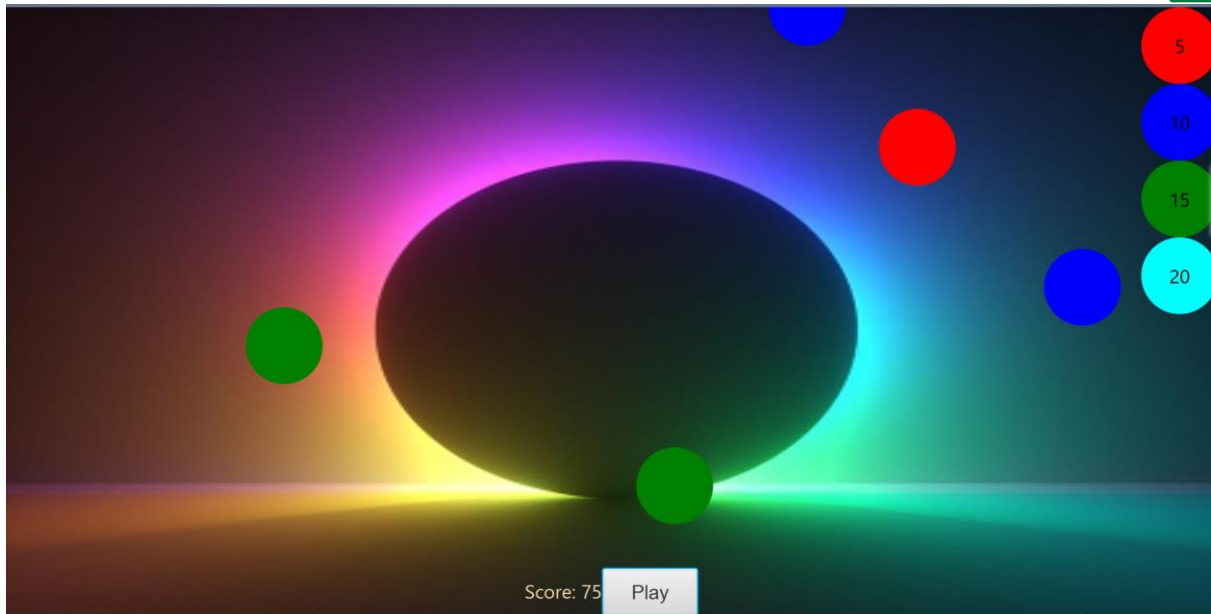| Name	Game Pane	Stage/Main interface	Falling Objects	Report
Syed Fareed	100%	50%	0%	50%
Rashid Alyami	0%	50%	100%	50%

4. Screenshots of the Working Program

Figure 1 Initial Screen

Figure 2. Screen during Mid game.

Figure 3. Game Over Screen

5. Conclusion:

The Speed Click Game offers an exciting and challenging experience for players who enjoy fast-paced clicker games. By implementing falling objects with different values, continuously updating the score, and displaying top scores, the game provides a competitive environment for players to test their clicking skills. With additional enhancements like power-ups and multiplayer mode, the game can be further customized and expanded to cater to a wider audience.