

IT2010 – Mobile Application Development BSc (Hons) in Information Technology 2nd Year Faculty of Computing

Faculty of Computing SLIIT

2023 – Lab Exam 03 Report

Student ID	IT22284198
Batch	MTR-Y2-S2-WEEKDAY
Marks	
Code Quality and Organization (2	
Points)	
2. Functionality (4 Points)	
3. Creativity and User Interface	
Design (2 Points)	
4. Performance and Stability (2 Point)	
Total: 10 Marks	
Evaluator	

Description:

The Snake game is a classic arcade game where the player controls a snake that moves around the screen. The objective is to eat rats that appears randomly on the screen, causing the snake to grow longer. The game ends when the snake hits the border of the screen or collides with its own body. The player's score is determined by the length of the snake at the end of the game. The game is simple yet challenging, requiring quick reflexes and strategic planning to avoid obstacles and maximize the snake's length.

Instructions:

1. Setting Up the Game Board

Grid Size: Decide on the size of your game board.

Snake Initialization: Start with a snake that is a single unit long, placed in the center of the grid.

Rat Placement: Randomly place rat on the grid.

2. Handling User Input

Direction Changes: Allow the player to change the direction of the snake's movement using touch screen inputs.

3. Updating the Snake's Position

Movement: On each game tick, update the snake's position based on its current direction.

Collision Detection: Check if the snake has collided with itself or the border. If so, end the game.

4. Managing the Snake's Length and Score

Eating Rat: When the snake's head reaches the same position as the rat, increase the snake's length by one unit and increase the score.

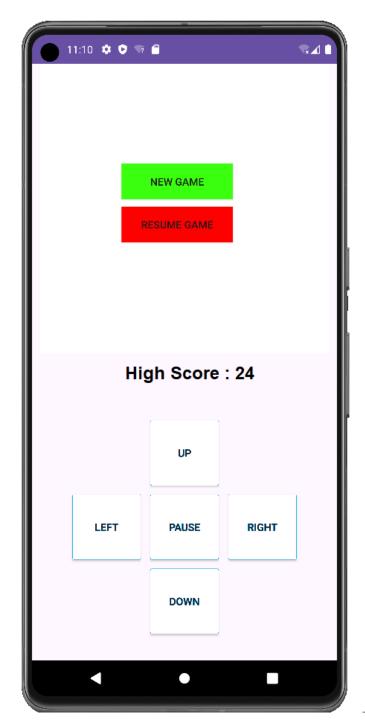
Score Display: Keep track of the player's score and display it on the screen.

5. Game Over Condition

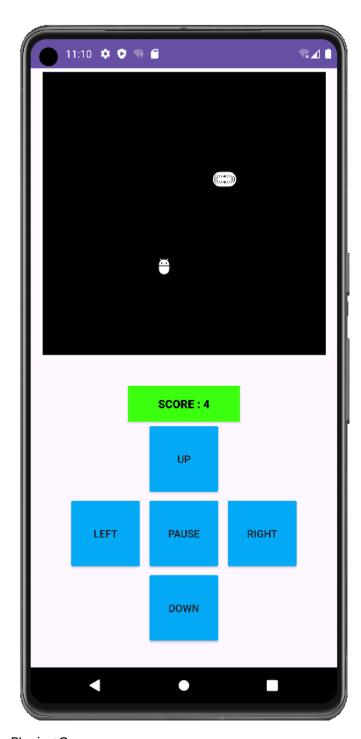
Border Collision: If the snake's head moves outside the boundaries of the grid, the game is over.

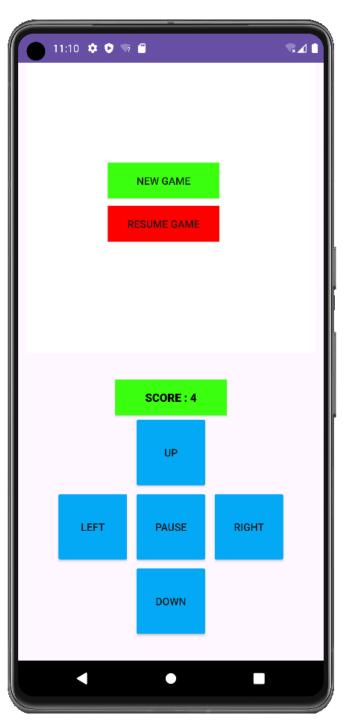
Screenshots:

Home page









Playing Game