Group 59

Momchil Damianov #1965131

Ivayla Ilieva #1953028

The two topics of choice for our group are :

1. To learn how to implement audio effects in the Java Swing system

(Point 10 in Backlog)

1. To learn how to use GitHub for version storage of our code

(Point 12 in Backlog)

Product Backlog :

1. Player Character Movement

- Name: Implement player character movement.

- How to Demo: Start the game, control the player character using left and right arrow keys to dodge incoming faces.

- Notes: Learn to handle user input, update player character's position, and detect collisions.

2. Custom Player and Enemy Sprites

- Name: Design and integrate custom player and enemy sprites.

- How to Demo: Show the custom-designed player and enemy sprites in the game.

- Notes: Gain experience in creating and incorporating graphical assets into the game.

3. Scoring System

- Name: Implement a scoring system.

- How to Demo: Display the player's score on the screen and update it as the player successfully dodges faces.

- Notes: Learn to track and update scores in the game.

4. Enemy Spawning

- Name: Create a system for spawning enemies (faces) from the top of the screen.

- How to Demo: Show faces spawning at regular intervals and descending towards the player.

- Notes: Gain experience in spawning and managing game objects dynamically.

5. Collision Detection

- Name: Implement collision detection between the player character and faces.

- How to Demo: Demonstrate that the game registers collisions when the player character touches a face.

- Notes: Learn how to handle collisions and respond accordingly in the game.

6. Background Design

- Name: Create a custom background for the game.

- How to Demo: Show the custom background in the game's display.

- Notes: Gain experience in setting up a visually appealing game environment.

7. Enemy Movement

- Name: Add movement patterns to the descending faces.

- How to Demo: Show the faces moving smoothly from top to bottom.

- Notes: Learn to control and animate enemy movements.

8. Column-Based Spawning

- Name: Implement column-based spawning for the faces.

- How to Demo: Show faces spawning from six imaginary columns at the top.

- Notes: Gain experience in arranging enemy spawns for varied gameplay.

9. Game Over Condition

- Name: Implement a game over condition.

- How to Demo: Show that the game ends when the player character collides with a face, and display the final score.

- Notes: Learn to manage game state transitions.

10. Sound Effects

- Name: Add sound effects for player actions and interactions.

- How to Demo: Demonstrate audio feedback for actions like dodging, collisions, and scoring.

- Notes: Gain experience in integrating sound into the game.

11. High Score System

- Name: Implement a high score system.

- How to Demo: Show the highest score achieved in the game and persistently store high scores.

- Notes: Learn to save and retrieve high scores between game sessions.

12. Git

- Name: Use GitHub to store code in a cloud

- How to Demo: Store and manage code using a reliable online platform for group projects

- Notes: Learn to save and retrieve versions of code using GitHub

Priority: The backlog items are prioritized from top to bottom based on their importance to the game's core functionality and user experience.

Game Design