

## Project: Gluttonous Snake Game

### Overview:

The Gluttonous Snake Game is a modern take on the classic snake game, built using the SFML (Simple and Fast Multimedia Library). The game features smooth graphics, responsive controls, and dynamic gameplay that challenges players to guide a snake to consume food while avoiding collisions with the game boundaries.

### Key Features:

#### Dynamic Gameplay:

- The snake grows longer as it consumes food, increasing the difficulty.
- Speed progressively increases as the player's score rises, creating a more challenging experience.

#### Collision Mechanics:

The game ends when the snake collides with its own body or the walls.

#### High Score Tracking:

- High scores are saved and loaded from a local file, creating a competitive aspect for players.

#### Visually Appealing Design:

- The snake is color-coded (yellow head and green body) for clarity.
- The food is bright red, making it easily identifiable on the board.

#### User-Friendly Interface:

- Start and game-over screens with clear instructions and score display.
- Real-time updates on the current score and high score during gameplay.

### Technical Highlights:

- Implemented using C++ and SFML for efficient graphics rendering and smooth gameplay.
- Utilizes object-oriented programming principles for clean, modular code.
- Adjustable game settings such as snake speed and decay rate for fine-tuning difficulty.