

Game Overview

In this Snake game, the player controls a snake that moves around a bounded 2D grid. The objective is to eat fruits, which causes the snake to grow longer. The game ends when the snake collides with the walls or itself.

Features

- Classic Snake gameplay with simple controls.
- Randomly generated fruit placement.
- Score tracking for both current and total scores.
- Restart or quit options upon game over.
- Basic collision detection.

Requirements

- A C compiler (e.g., GCC, MinGW) to compile the code.
- A Windows environment for compatibility with conio.h and windows.h functions.

Gameplay Instructions

- **Movement Controls:**
 - **W:** Move Up
 - **A:** Move Left
 - **S:** Move Down
 - **D:** Move Right
 - **P:** Pause/Unpause the game
 - **Q:** Quit the game
- **Objective:**
 - Collect fruits (*) to grow the snake and increase your score.
 - Avoid colliding with walls (#) or the snake itself.

Code Structure

The code consists of several key functions:

- **main():** Controls the main game loop and user input.
- **displayWelcomeMessage():** Shows the welcome message and game instructions.
- **initializeBoard():** Sets up the game board with borders, the snake, and fruit.
- **drawBoard():** Renders the current state of the game board to the console.
- **updateBoard():** Updates the board state based on the current position of the snake and fruit.
- **isFruitLocationValid():** Validates if the fruit can be placed at the given coordinates.
- **updateSnake(int dir):** Updates the snake's position and checks for collisions.
- **gameOverMessage():** Displays the game over message and allows the player to restart or quit.

