

Snake Game

This is a classic Snake Game built in Python using the Turtle module. The game allows you to control a snake to eat food and grow in length while avoiding collisions with walls and itself.

Installation

Prerequisites

- Python 3.x installed on your system (I have used 3.11.3).
- Ensure the following Python modules are installed:
 - ``turtle``: To handle the graphics.
 - ``time``: To control the speed of the game.

Setup

1. Clone or download this repository to your local machine.
2. Ensure you have Python installed and open pycharm.
3. Navigate to the directory where the game files are located.
4. Run the following command to start the game:

How to Play

- Use the arrow keys on your keyboard to control the snake's direction: Up, Down, Left, Right.
- Guide the snake to eat the food (green squares) that appear randomly on the screen.
- Each time the snake eats the food, it grows longer and your score increases.
- Avoid collisions with the walls or the snake's own body.
- The game ends when the snake hits the walls or collides with itself.
- Click on the game window to close it after the game ends.

Files Structure

- ``main.py``: The main Python script that runs the game.

- `snake.py`: Contains the Snake class with methods for controlling the snake's movement and growth.
- `food.py`: Defines the Food class responsible for generating and refreshing the food on the screen.
- `scoreboard.py`: Manages the game score and displays game over messages.

Game Controls

- **Up Arrow**: Move the snake upwards.
- **Down Arrow**: Move the snake downwards.
- **Left Arrow**: Move the snake to the left.
- **Right Arrow**: Move the snake to the right.

Additional Notes

- The game's speed can be adjusted by modifying the `time.sleep()` duration in `main.py`.
- Feel free to explore and modify the code to add new features or improve the game.