

Project

Snake Game – with Highscore Tracking

Overview of the Project

This project is an operational Snake Game created with Python and Pygame.

The game features a menu, pause functionality, highscore storage, fluid movement, grid-style graphics and reactive controls.

It is created to be easy, for beginners while maintaining an appearance and code organization that appears written by humans.

Features

Smooth grid-based Snake movement

Random food spawning

Real-time score tracking

Top score stored locally (snake_score.txt)

Pause & resume system (press P)

Main Menu & Game Over screens

Humanized UI with colors & soft overlays

Your speed dynamically increases as you consume food

Safe highscore file handling

Technologies / Tools Used

Component Description

Python 3.data Primary programming language

Pygame Utilized for graphics, event handling and the game loop

Pathlib To handle highscore file (snake_score.txt)

Random module Produces locations, for food placement

Steps to Install & Run the Project

1. Install Python

Ensure that Python 3.data is properly installed.

Check with:

```
python --version
```

2. Install Pygame

Run:

```
pip install pygame
```

3.. Duplicate the project files

Save it as:

snake_game.py

4. Run the game

Use:

python snake_game.py

The game screen will launch on its own.

Instructions for Testing / Playing

Controls

Key Action

↑ / W Go Up

↓ / S Step Down

← / A Move Left

→ / D Move Right

SPACE / ENTER Start Game / Restart

P Pause / Resume

ESC Exit to Menu / Quit

Game States

Menu Screen → Press **SPACE** or **ENTER** to play

Playing → Move the snake, eat food, increase score

Paused → Hit **P** to resume

Game Over → Press **SPACE** to restart

The highscore updates automatically. Gets saved in:

snake_score.txt