Pixl Runner Game

1. Introduction

Pixl Runner is a 2D running game made with Python and Pygame. The player controls a small character that can walk and jump. The goal is to stay alive by avoiding obstacles and to get the highest score possible.

The game has background music, sound effects, animations, and changes the scenery between jungle and cave to make it more fun.

2. What You Need

To play this game, you need:
- Python installed on your computer.
- The Pygame library.

3. Parts of the Game

a) Player (main character)
- The player can jump by pressing the spacebar.
- Gravity pulls the player back down after jumping.
- The player shows walking animation when on the ground.
- The player shows a jump image in the air.
- A jump sound plays each time the player jumps.

b) Obstacles
- Obstacles are snails and flies.
- Snails appear from the start.
- Flies appear after the game gets harder.
- Obstacles move across and get faster as time goes on
- If the player touches an obstacle, the game ends.

c) Background (Day/Night Cycle)
- The background changes between jungle (day) and cave (night).
- The change happens as the player survives longer.
- This makes the game look fresh and exciting.

d) Score and High Score
- Score is based on how long the player stays alive.
- A high score is saved and shown on the screen.

• The high score encourages players to keep improving

e) Menu and Game Over Screen
• At the start, the menu shows the game title and instructions.
• Background music plays in the menu.
• When the player loses, a Game Over screen appears
  showing the current score and the high score.
• Players can restart by pressing the spacebar.

4. How to Play
• Press the spacebar to jump.
• Avoid all obstacles (snails and flies).
• Survive longer to get a higher score.
• Try to beat the high score.

5. Features and Future Ideas

Features now
• Walking and jumping animations.
• Gravity system for realistic jumps.
• Background music, jump sound, and game over sound.
• Jungle and cave cycle for background.
• Random obstacles that get faster.
• Fly obstacle unlocked after survival time.
• Score and high score display.
• Menu and Game Over screen.

Ideas for future
• Power-ups like shield or double jump.
• Save high score even after closing the game.
• More obstacle types and bosses.
• Weather effects like rain or lightning.
• Choose different player characters or skins.

6. Conclusion

Pixl Runner is a simple but fun running game that uses Python and Pygame. It combines animations, sounds, scoring, and background changes to create an enjoyable challenge. The game teaches how to work with sprites, gravity, collisions, sounds, and timers in Pygame. It can also be expanded with new features to make it even better.