

# **Project Name : Introduction to Python Minor Project**

## **TOPIC: A game using Python.**

### **Game Manual**

This manual will guide you through the gameplay, controls, and features of the game.

### **Game Overview**

Smooth Driver is an exciting and fast-paced driving game where your objective is to drive as far as possible on a three-lane highway while avoiding other vehicles. The game tests your reflexes and quick decision-making skills as you navigate through traffic.

### **Game Controls**

Arrow Keys (Left/Right): Left Arrow ( $\leftarrow$ ): Move your car to the left lane. Right Arrow ( $\rightarrow$ ): Move your car to the right lane. M Key: Toggle background music on or off. R Key: Restart the game after a crash. Q Key: Quit the game.

### **Game Objective**

Drive as far as you can without crashing into other vehicles. Your score increases the longer you survive and the more vehicles you avoid. The game becomes progressively harder as your speed increases.

### **Game Features**

1. Road and Lane Structure The game screen is divided into three lanes. Each lane is marked by dashed lane markers, and the edges of the road are marked by solid yellow lines.
2. Player Vehicle You control a car that starts in the center lane at the bottom of the screen. Use the arrow keys to change lanes and avoid other vehicles.
3. Opponent Vehicles Other vehicles will appear at the top of the screen and move downward. These vehicles include different types, such as pickup trucks, semi-trailers, taxis, and vans. The speed of the opponent vehicles increases as your score increases.

4. Scoring You earn 1 point for every vehicle you successfully avoid. Every 5 points increase the game's speed, making it more challenging.
5. Collision and Game Over If you collide with another vehicle, the game will end. A "Game Over" screen will be displayed with your final score. You can choose to restart the game by pressing the R key or quit by pressing the Q key.
6. Sounds and Music The game features background music and highway sound effects for an immersive experience. You can toggle the background music on or off by pressing the M key. Only background music could be turned off highway sound is on by default for real time experience.

## **System Requirements**

**Operating System:** Windows, macOS, or Linux.

**Dependencies:** The game requires Python and Pygame(framework used) installed on your system.

**Screen Resolution:** The game is designed for a screen resolution of 500x500 pixels

**Tips and Strategies** Stay in the center lane to quickly switch to either the left or right lane when needed. As the game speed increases, anticipate the movement of opponent vehicles and plan your lane changes in advance. Toggle the background music off if you find it distracting during gameplay.

## **DEMO VIDEO:**

The demo video of the game is attached in the file with scripts and other file of the game.