

# SYNOPSIS

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Project guide :

## 2D Car Racing Game

### ❖ Introduction

- This is a 2D car racing game which is very easy to play with easily understandable controls and UI.
- This is a very nostalgic racing game which provoked our interest in cars and racing. This game also points to the early period of time when visual graphics were rising in the gaming industry. It was the start of genre of car racing games in the gaming sector.
- This game consists of basic controls in which the players vehicle moves from left to right in order to avoid the oncoming vehicles and obstacles to gain more miles and if you get crashed onto the obstacles the game will end and it will display you the players score which makes us play it again and again with the excitement to beat our previous highscore.

### ❖ Objectives

- **Fun Activity** – This is a very fun activity for anyone even an adult who just wants to have some fun and enjoy games.
- **Goals** – This game makes us play it again and again to beat our previous highscore and achieve new distance.
- **Nostalgia** – This is one of the game which makes us nostalgic to our childhood and this game also peeked our interest in cars, races and automobiles.

- **Enjoyment** – This game with basic controls is enjoyable and a great way of passing time with a hint of challenges and achievements.
- **Sharpness** – Because of the oncoming vehicles and obstacles we use our reflexes to avoid them which helps increase our hand-eye coordination and also improve our reflexes.
- **Friendly Competition** – It creates an environment of friendly competition to achieve more distance and beat each other's highscore.

## ❖ Modules

- **Players vehicle** – The players which move from left to right to avoid collision with the oncoming obstacles.
- **Obstacles** – The obstacles are the vehicles which move at a certain speed towards the players vehicles. The players must avoid these obstacles in order to not get crashed.
- **Distance tracker** – This module tracks the distance the player has survived without getting crashed onto the obstacles.
- **Scorecard** -Based in the distance travelled without getting crashed and then the scorecard displays you the players score.
- **Controls** – The controls are to move left and right in order to avoid obstacles and survive getting crashed.
- **Sound effects** – The sound effects will increase the playfulness of the environment and increase the realism of the game.
- **Start and Stop panel** – This panel will contain the start button to start the game and the quit button to end the game whenever the player wants.

## ❖ Programming language

- Python – Pygame