

3D Car Racing Arena

In this project, we will have a player driving a car around a 3D racetrack. Along the way, they must dodge obstacles and defeat rival cars by firing missiles and also the rival car will fire missiles and our player has to avoid it. The player can also activate a cheat mode for automatic driving and firing, and use a nitro boost to move faster for a short time. The nitro boost can be used when the boost bar will be full

The game offers two camera views: a third-person chase view and a first-person driver's view. The goal is to survive as long as possible, destroy enemies, and score high. The game ends if the player loses all their lives or misses too many shots.

Member Contributions:

Member 1

1. Player car control (W, A, S, D keys)
2. Bullet (missile) firing (Left Mouse Click)
3. Race track creation
4. Random obstacle placement (cones, barriers)
5. Player car camera view first person/third person

Member 2

1. Enemy car movement (move around track, chase or random movement)
2. Enemy cars can fire missiles at the player randomly
3. Check the weather is rainy, foggy, day and night. When it is the rainy the track will be slippery
4. Cheat mode: Player auto-drives and auto-fires towards enemies

Member 3

1. Selecting the cars at the beginning of the game. There will be 3-4 car the player will select with which car they will play

2. The player will fall traps for the enemy behind
3. Cheat mode2 : During this the car will be in passive mode the enemy won't be able to see the enemies. And upon collision with the enemy the enemy car will be destroyed and score will increase
4. Nitro boost system (only when boost bar full, activated by Spacebar)
5. Game reset and Game over animation (car gets on fire)

Key / Mouse Action

W	Move car forward
A	Move car backward
S	Rotate car left
D	Rotate car right
Left mouse click	Fire bullets
Right Mouse click	First person or third person view
Spacebar	Hit nitro
C	Cheat mode
B	Ceat mode2(after scoring 10 points)
T	Falls a trap
Left arrow	Move camera left
Right arrow	Move camera Right
Up arrow	Move camera Up
Down arrow	Move camera Down
1	Day(default)
2	Night
3	Rainy