

Enhancing Road Safety with an Interactive Motor Bike Simulator (Avoiding Manmade Disaster)

Problem Statement:

With an increase in road accidents involving two-wheelers, it's clear that there's a pressing need for better awareness about following traffic rules. Picture a scenario where people could practice safe riding in a controlled environment, learning the importance of proper handling and obeying traffic regulations. This is where an interactive Motor Bike Simulator comes in—a tool designed to provide hands-on experience while emphasizing the significance of responsible riding.

Problem Description:

Imagine having a safe space to learn and practice riding a motorbike, without any real-world risks. The challenge is to create a Motor Bike Simulator that feels just like riding a real bike. It will have physical handles connected to sensors, mimicking the experience of turning and controlling speed. The simulation will be displayed on a screen, and users will earn points for following traffic rules and face consequences for violations. This simulator will be a powerful tool for educating riders about responsible and safe biking practices.

Objective:

Your mission is to develop an interactive Motor Bike Simulator that provides a realistic experience of riding while emphasizing the importance of obeying traffic rules. The simulator will feature physical handles connected to sensors, allowing users to control the direction and speed of the virtual bike. Points will be awarded for adhering to traffic regulations, while violations will result in penalties, eventually leading to the end of the simulation.

Key Considerations:

- **Realistic Riding Experience:** The simulator should offer an authentic feel of riding a motorbike, providing users with an immersive experience.
- **Interactive Learning:** Users should be able to engage with the simulator actively, learning the significance of following traffic rules through hands-on practice.
- **Safe Environment:** The simulator offers a risk-free space for users to make mistakes, learn from them, and understand the consequences of not following traffic regulations.

Deliverables:

1. A Motor Bike Simulator with physical handles connected to sensors, providing a lifelike riding experience.
2. A game on the screen that displays the virtual simulation, where users can interact and practice safe riding.