

## # 🚗 Smart Hazard Detection System – Problem Statement

### ## ❤️ Background

Road safety is a critical issue in both urban and rural environments. Drivers frequently encounter unexpected hazards such as potholes, speed breakers, and open manholes.

---

### ## 💡 Problem Definition

The current system faces several challenges:

- Unreliable hazard reporting
- Dynamic road conditions
- Lack of real-time detection
- Unmarked hazards

---

### ## ⚠️ Impact

- Increased accidents
- Vehicle damage
- Unsafe driving

---

### ## 🎯 Objective

To build a system that detects hazards in real time and alerts users.

---

### ##💡 Proposed Solution

Use GPS, accelerometer, and elevation data to detect hazards and store them in Firebase, providing real-time alerts.