## PROJECT DESCRIPTION

This project involves designing a **Smart Traffic Light Control System** using **Arduino Uno** and **ultrasonic sensors** to manage a two-way road junction. The system detects vehicle presence on each road in real-time and dynamically adjusts the traffic lights (represented by LEDs) to prioritize the direction with higher traffic. By automating signal control based on actual traffic conditions, the system helps reduce congestion and wait times. The prototype circuit is designed and simulated in Tinkercad, offering a cost-effective and scalable solution for intelligent traffic management.

Video link: [Youtube Video](https://youtu.be/KxXHu7FNXdo)