

# Project Objective

Date	16 November 2022
Team ID	PNT2022TMID22305
Project Name	Signs with Smart Connectivity for Better Road Safety

## Problem statement :

This project will replace static signs with smart signs that can adjust speed limits based on weather and climate, display detour instructions in the event of an accident, and display alert messages in the event of hospitals, schools, or roadworks. It will also use an AI sensor and an AI chip to control traffic signals and avoid accidents in digital signs.

## Project Objective :

- Learn about the Watson IoT Platform.
- Linking IoT devices to the Watson IoT platform, exchanging data, and displaying values
- Learn about the OpenWeatherMap API Service.
- Developing a Web Application that allows the user to interact with the device.

## Project Flow:

- The Node-RED Web UI is sending road sign values to the IBM IoT platform.
- The Web Application displays weather conditions.

To accomplish this, we have to complete all the activities and tasks listed below:

- IBM Cloud Services must be created and configured.
- IBM Watson IoT Platform should be created.
- Create a device and set up the IBM IoT Platform.
- Make a Node-RED service.
- To store location data, create a database in Cloudant DB.
- Create a web application with the Node-RED Service.
- Using Node-RED, create a web application.
- Create a Python script that will publish the location information to the IBM IoT platform.

