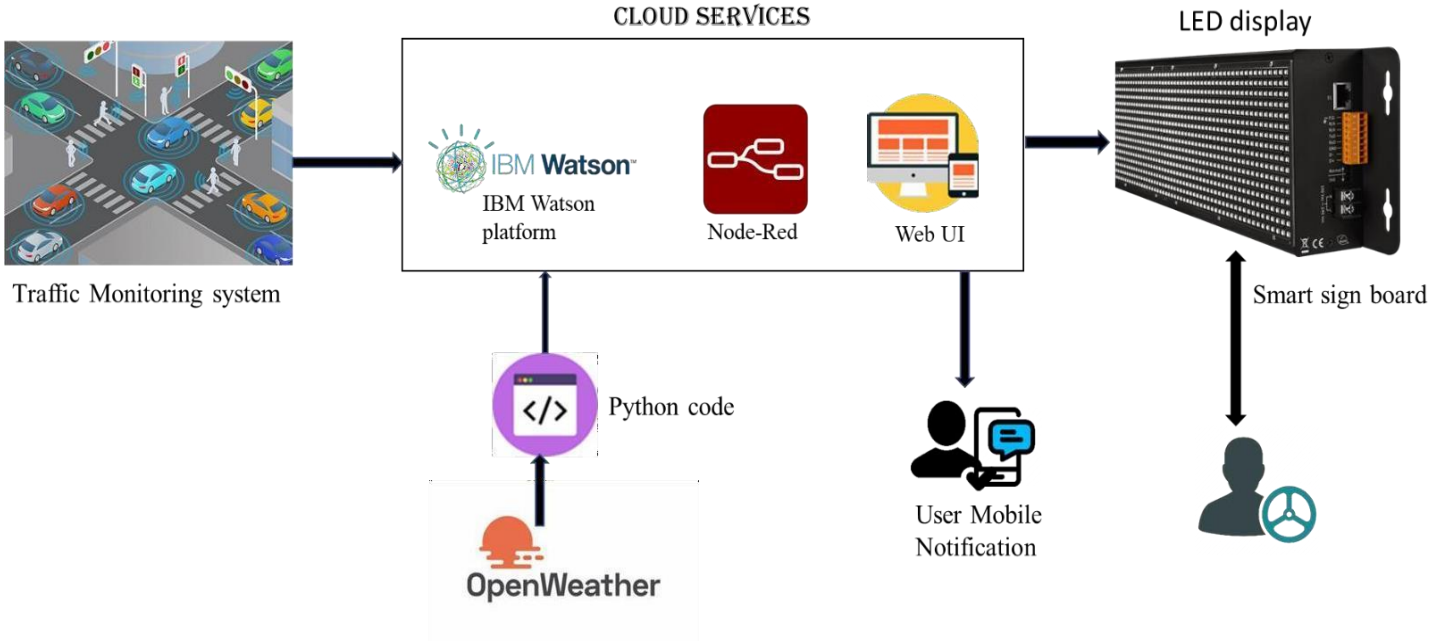
Project Design Phase II
Technology Stack (Architecture & Stack)

Date	10 November 2022
Team ID	PNT2022TMID12702
Project Name	Signs with Smart Connectivity for Better Road Safety
Maximum Marks	4 Marks

Technical Structure:



GUIDELINES:

- To replace the static signboards, smart connected sign boards are used.
- These smart connected sign boards get the speed limitations from a web app using weather API and update automatically.
- Based on the weather changes the speed may increase or decrease.
- Based on the traffic and fatal situations the diversion signs are displayed.
- Guide(Schools), Warning and Service(Hospitals, Restaurant) signs are also displayed accordingly.
- Different modes of operations can be selected with the help of buttons.

Table-1: Components & Technologies

S.NO	Component	Description	Technology
1	User Interface	In what way the user interacts with the application, in this case Web UI app	Javascript, HTML, CSS
2	Application Logic -2	A logic for the process in the application	IBM Watson STT Service
3	Application Logic-3	A logic for the process application	IBM Watson Assistant
4	Cloud Database	Cloud which has database service	IBM DB2, IBM Cloudant
5	External API-1	Purpose of external API in the application	IBM Weather API

Table-2: Application Characteristics

S.NO	Characteristics	Description	Technology
1	Security Implementations	A very strong security system where no one will be able access without login credentials	Firebase. Firewall, Cyber resiliency strategy
2	Scalable Architecture	By increasing the bandwidth, the operating range can be increased	IoT, Internet
3	Availability	Available 24/7	IBM Cloud
4	Performance	It can support a large number of users to access the technology	IBM Cloud