Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID34520
Project Name	Project – Signs with Smart Connectivity For Better Road Safety
Maximum Marks	4 Marks

Technical Architecture:
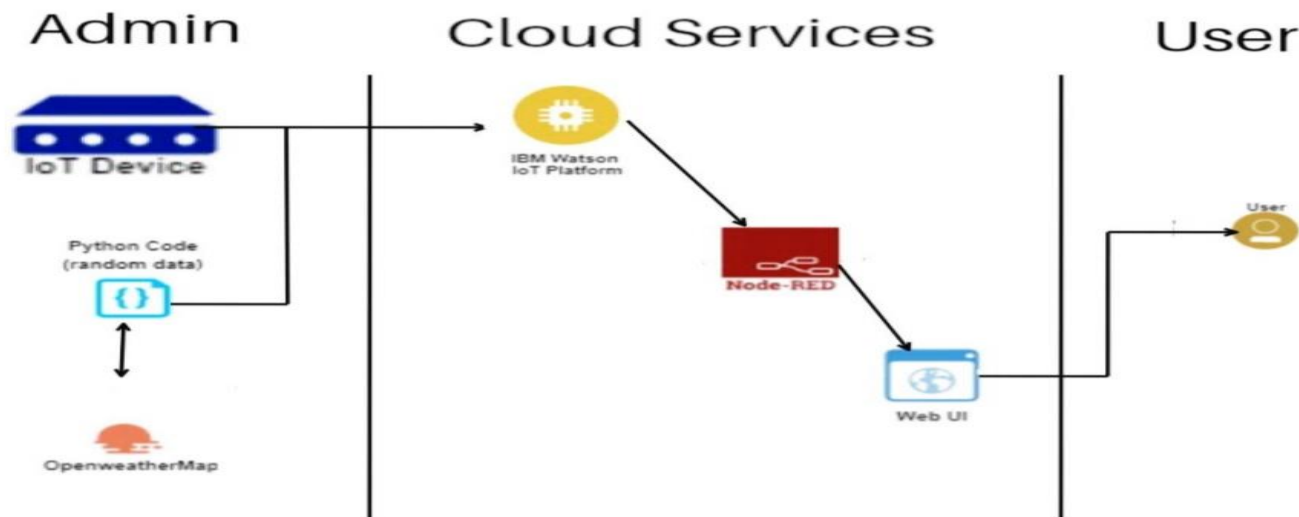
Guidelines:

• Smart Connectivity based signboards are used to replace static

signboards.

• Based on situations, like high traffic, construction or branch on the road

etc the diversion signs are changed.

• Sign boards in the vicinity of schools, hospitals, restaurants etc have

Signs displayed accordingly.

• Speed limitations can be sent through a web app, which gets weather

Conditions from weather API and changed in the signboards.

• Many different operation can be updated like finding the number of

passengers in a vehicle, helps in finding stolen vehicles easily.

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	In what way we have to interact with the application .Here we say as LED	PYTHON
2.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
3.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
4.	Cloud Database	Cloud which has database service	IBM DB2, IBM Cloudant etc.
5.	External API-1	Purpose of External API used in the application	IBM Weather API

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	Here no one will be able to access without login credentials in a very strong security system	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 amount of users to access the technology.	IBM Cloud