

## Project Design Phase-II

### Technology Stack (Architecture & Stack)

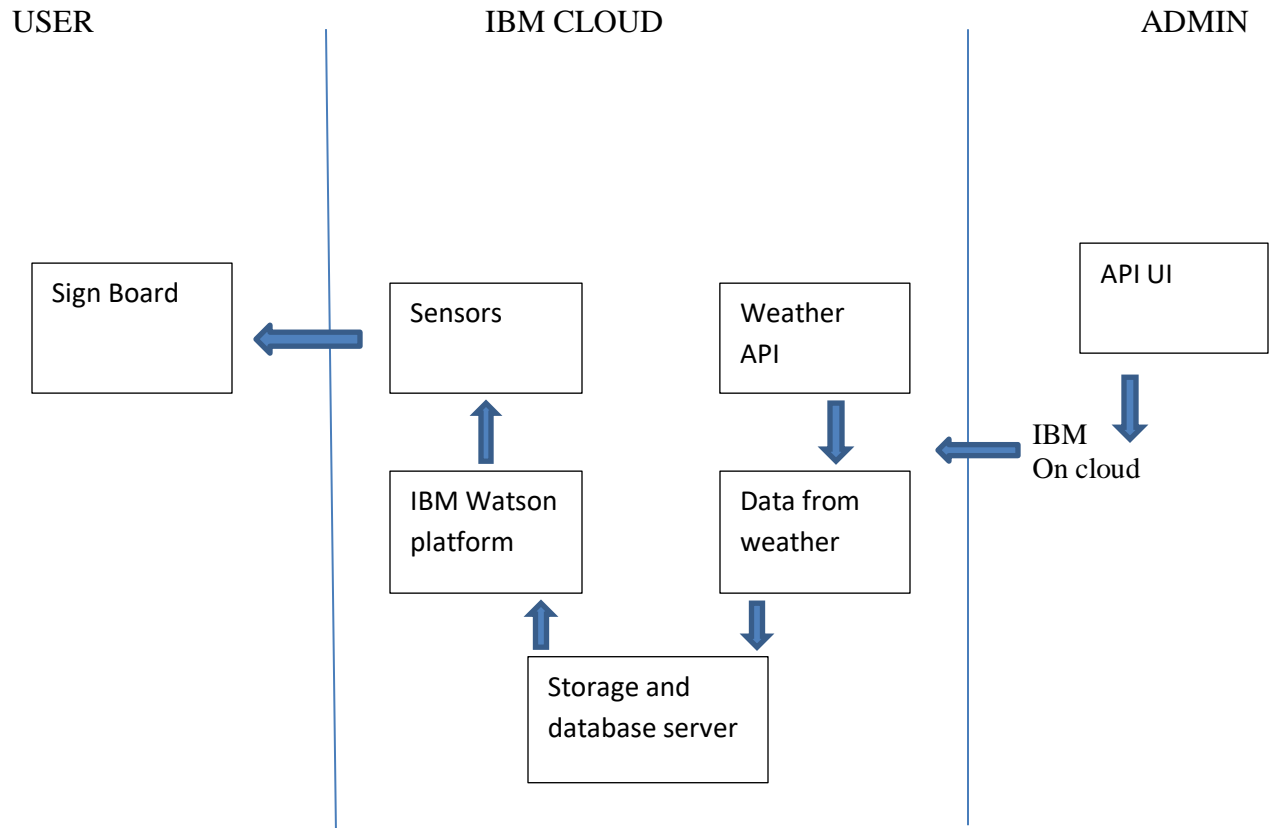
Date	15 October 2022
Team ID	PNT2022TMID32727
Project Name	Project-Signs with Smart Connectivity for Better Road Safety
Maximum Marks	4 Marks

#### Technical Architecture:

#### Signs with Smart Connectivity for Better Road Safety

##### Guidelines:

1. To replace static signboards, smart connected sign boards are used.
2. These smart connected sign boards get the speed limit from a web app using weather API and update automatically.
3. Based on the weather changes the speed may increase or decrease.
4. Based on traffic and fatal situations diversion signs and guide signs are displayed.



**Table-1: Components & Technologies:**

S. No	Component	Description	Technology
1	User Interface	It means by which the user and a computer system interact in particular the use of input devices and software e.g. Web UI, Mobile App, Chatbot etc	HTML, CSS, JavaScript / Angular Js / React Js etc.
2	Application Logic-1	Wear seatbelts and helmets. Be care full of speed limits.	IBM Watson STT service
3	Application Logic-2	Walk carefully on the sidewalks and only cross on the zebra crossing	IBM Watson Assistant
4	Cloud Database	All highway can improve their ability to respond to safety concerns by having a reliable database that provides easily accessible.	IBM DB2, IBM Cloudant etc.
5	External API-1	Aim is to provide road safety information to the road users.	IBM Weather API, etc.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1	Security Implementations	Strong security system that anyone without login credentials and hackers are not allowed to enter the network.	Firewall, Firebase, Cyber resiliency strategy.
2	Scalable Architecture	It should be able to easily change and need in requirement.	IOT, Internet.
3	Availability	It should be available 24/7 so that it can be beneficial to the customer.	IOT, Internet.
4	Performance	Supports a large number of users to access the technology simultaneously.	IOT, Internet.