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

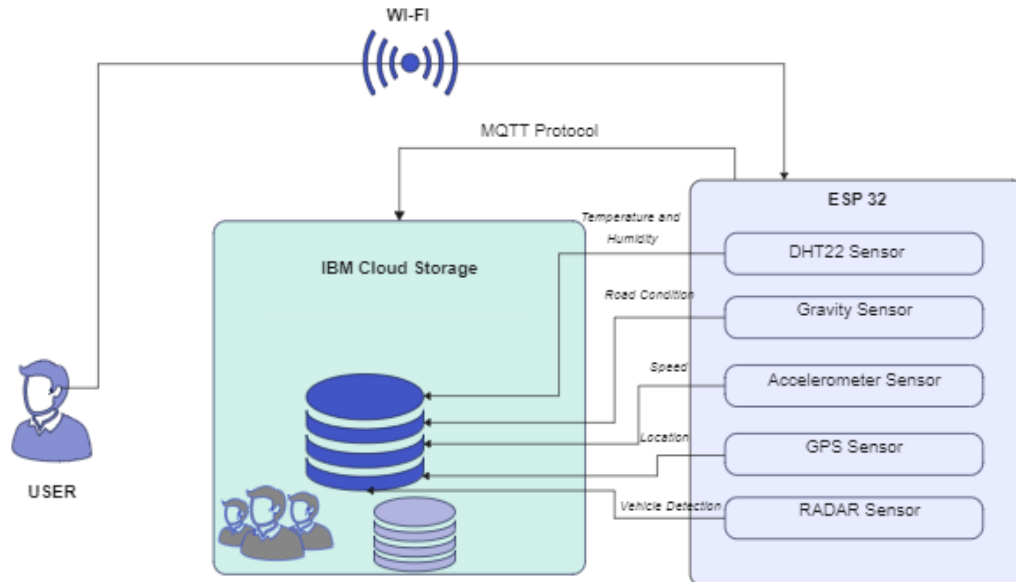|	
Date	07 October 2022
Team ID	PNT2022TMID48642
Project Name	Signs With Smart Connectivity for Better Road Safety
Maximum Marks	4 Marks

Technical Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	To display the Humidity,temperature and messages to the user.	MIT app inventor.
2.	Application Logic-1	For the front -end purpose	MIT app Inventor
3.	Application Logic-2	Link to the website application	Node-Red service.
4.	Application Logic-3	To connect the user device and gather information about atmosphere.	IOT Devices.

5.	Cloud Database	To store the information about the Temperature, Humidity	IBM DB2, IBM Cloudant, etc.
6.	External API-1	To identify the Temperature ,and Humidity.	Open Weather Map
7.	External API-2	To create the circuit for the device of ultrasonic ,etc.	Tinkercad , Wowki .
8.	Infrastructure (Server / Cloud)	To connect the service to the website	Node-Red app, Cloud Foundry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Scalable Architecture	The road safety can be enhanced to a greater level since it has the ability to sense the weather condition,road condition and vehicle detection.	IOT sensors.
2.	Availability	The user can get this as a plug—in device and it will help the user in a great manner.	IOT sensors, MIT inventor.
3.	Performance	Using this as a plug-in device in car will improve its performance by assuring the safety driving.	IOT sensors ,Cloud service .