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

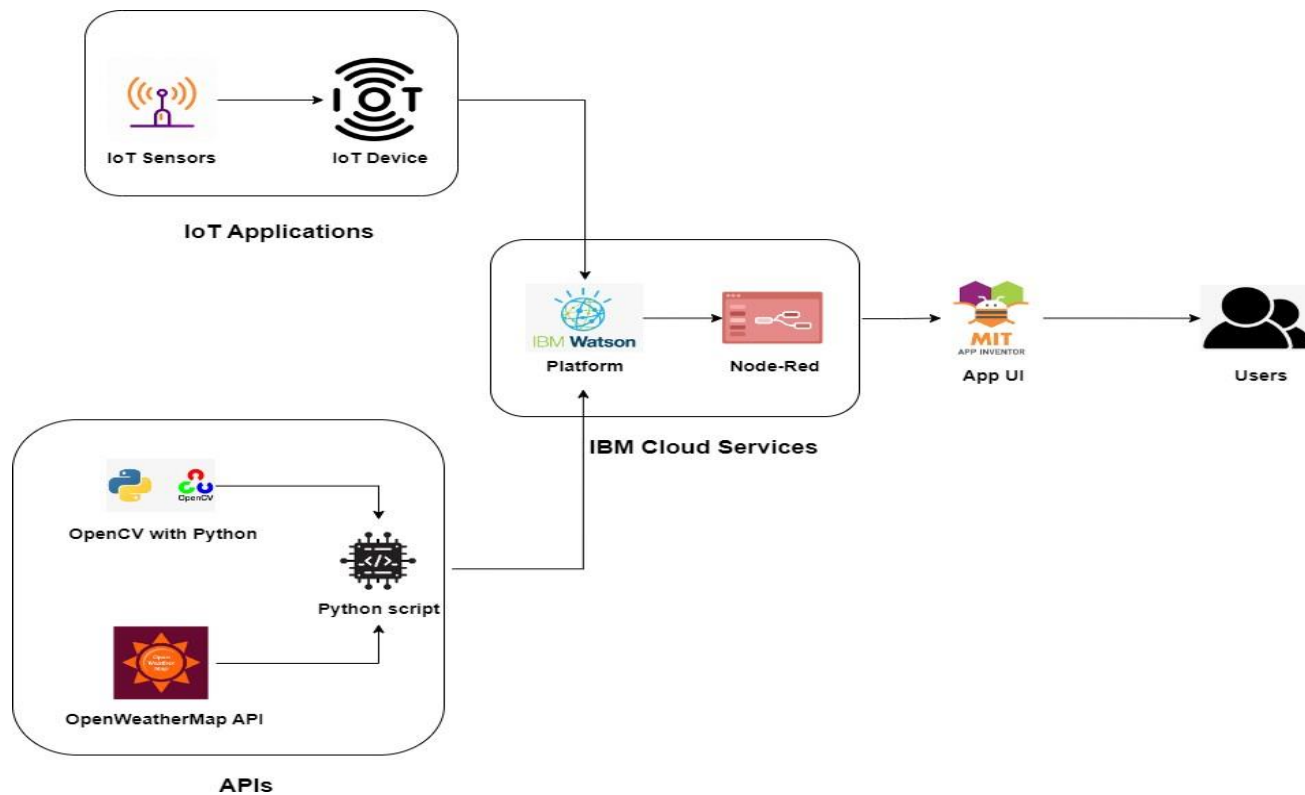| Date	03 October 2022
Team ID	PNT2022TMID49201
Project Name	Project - **Signs with Smart Connectivity for Better Road Safety**
Maximum Marks	4 Marks

Technology Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can interact with the app using MIT App	HTML, CSS, JavaScript / Angular Js / React Js
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	IBM Cloud
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	Open Weather Map API
9.	External API-2	Purpose of External API used in the application	IBM Watson Platform , Node - Red
10.	Machine Learning Model	Purpose of Machine Learning Model	OpenCV
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	*OpenWeatherMap , NODE-RED, IBM WATSON, MIT App Inventor*	IoT, internet
2.	Security Implementations	*Powerful security system for everyone's peace of mind* *No access data* *Hackers cannot access* *network*	Firewall, Firebase, cyber resiliency,strategy
3.	Scalable Architecture	*EASY TO EXTEND THE NETWORK WITH THE AID OF THE BANDWIDTH OF THE NETWORK*	IBM Cloud
4.	Availability	*Available every time and everywhere 24/7 so long as the consumer is signed into the network.*	IBM Cloud
5.	Performance	*AIDS MASSIVE RANGE OF USERS TO USE TECHNOLOGY*	IBM Cloud