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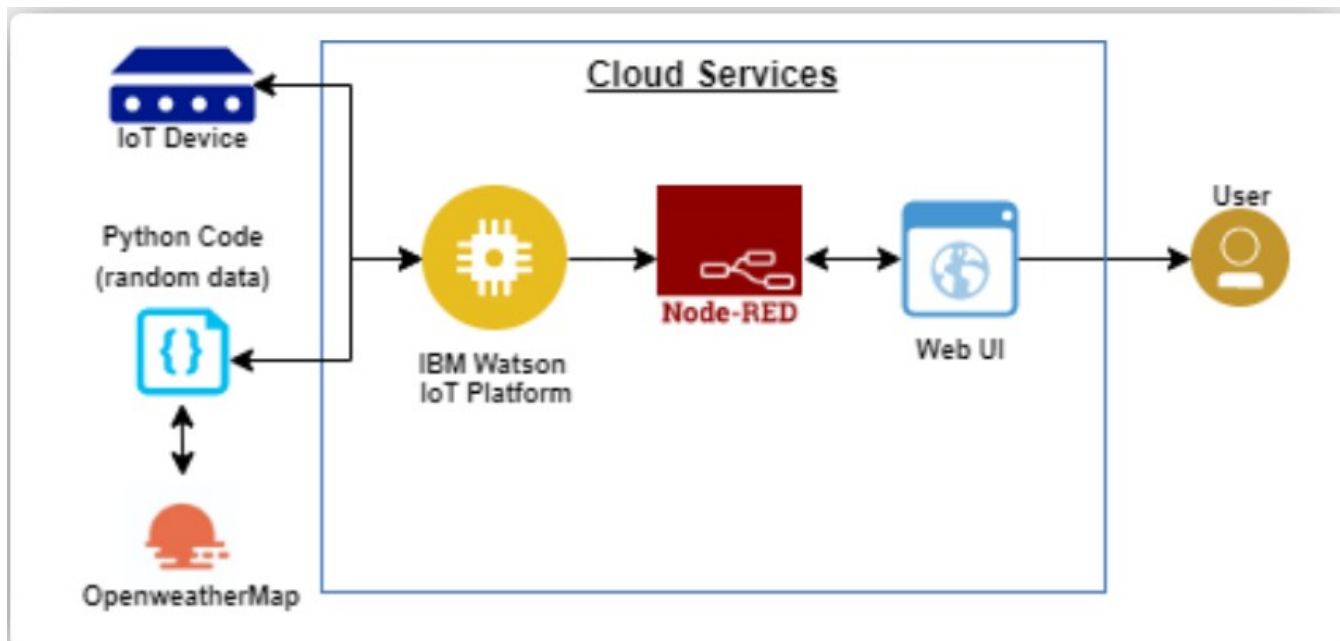# Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID04551
Project Name	Signs with Smart Connectivity for Better Road Safety
Maximum Marks	4 Marks

GUIDELINES:

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

S.No	Component	Description	Technology
1.	User Interface	How user interacts withapplication e.g. Web UI, Mobile App,Chatbot etc.	HTML, CSS, JavaScript /Angular Js / React Js etc.
2.	ApplicationLogic-2	Logic for a process in theapplication	IBM Watson STT service
3.	ApplicationLogic-3	Logic for a process in theapplication	IBM Watson Assistant
4.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
5.	External API-1	Purpose of External APIused in the application	IBM Weather API, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	Strong security system that anyonewithout login credentials and hackers are not allowed to enter the network.	Firewall, Firebase,cyber resiliency strategy
2.	Scalable Architecture	Easy to expand the operating rangeby increasing the bandwidth of the network.	IoT, internet.
3.	Availability	Available anytime and everywhere24/7 as long as the user is signed into the network.	IBM Cloud
4.	Performance	Supports a large number of usersto access the technology simultaneously.	IBM cloud