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

Date	20 October 2022
Team ID	PNT2022TMID41261SIGNS WITH SMART CONNECTIVITY FOR BETTER RPAD SAFETY
Project Name	Project -SIGNS WITH SMART CONNECTIVITY FOR BETTER RPAD SAFETY
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
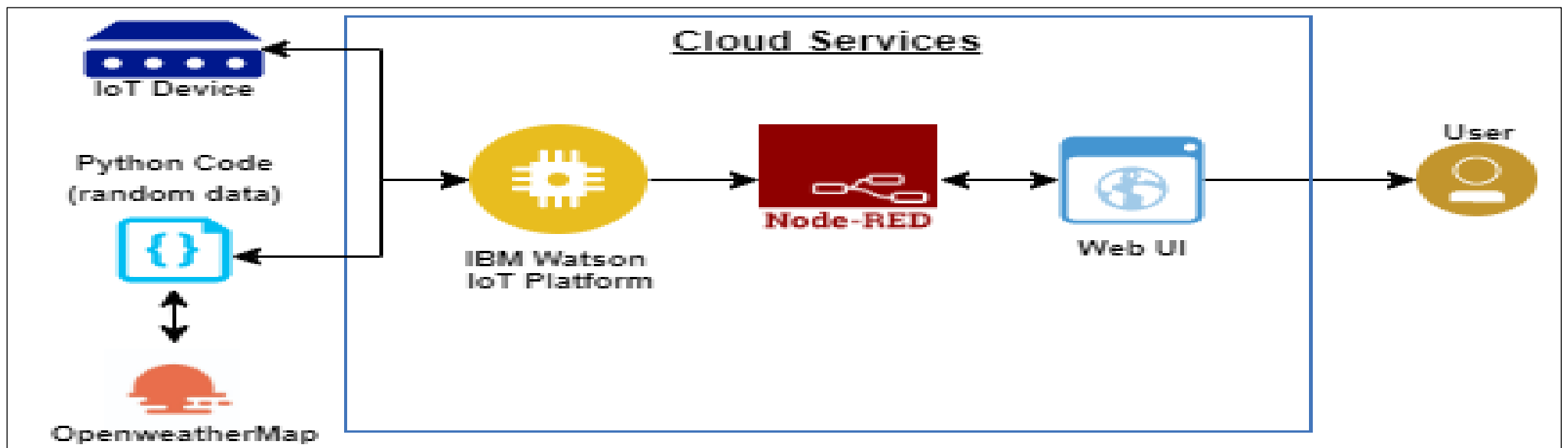
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Dynamic board	Python
2.	Weather Reading	Reading Weather condition	Python
3.	Control speed of transporting vechicle	Intimate the speed for specific road	Dynamic board and IBM Watson Assistant
4.	Hardware Device	For sensing environment condition	LCD Display and Sensors
5.	Cloud Database	Database Service on Cloud	IBM Cloudant
6.	Cloud connectivity	Connecting Hardware to cloud	Wi-fi module for ESP32
7.	External API-1	Purpose of External API used in the application	IBM Weather API

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Weather API
2.	Security Implementations	Secure road travel and safe Driving	Encryption
3.	Scalable Architecture	scalability of architecture	Python ,WEB UI, Node red, IBM Watson IOT platform
4.	Availability	availability of application	Weather API
5.	Performance	performance of the application	Can Monitor weather condition and network connectivity simultaneously