PROJECT DESIGN PHASE -1

SOLUTION ARCHITECTURE

Date	19 October 2022
Team ID	PNT2022TMID12941
Project Name	Project – Signs with smart connectivity for better road safety
Maximum Marks	4 Marks

SOLUTION ARCHITECTURE DIAGRAM:
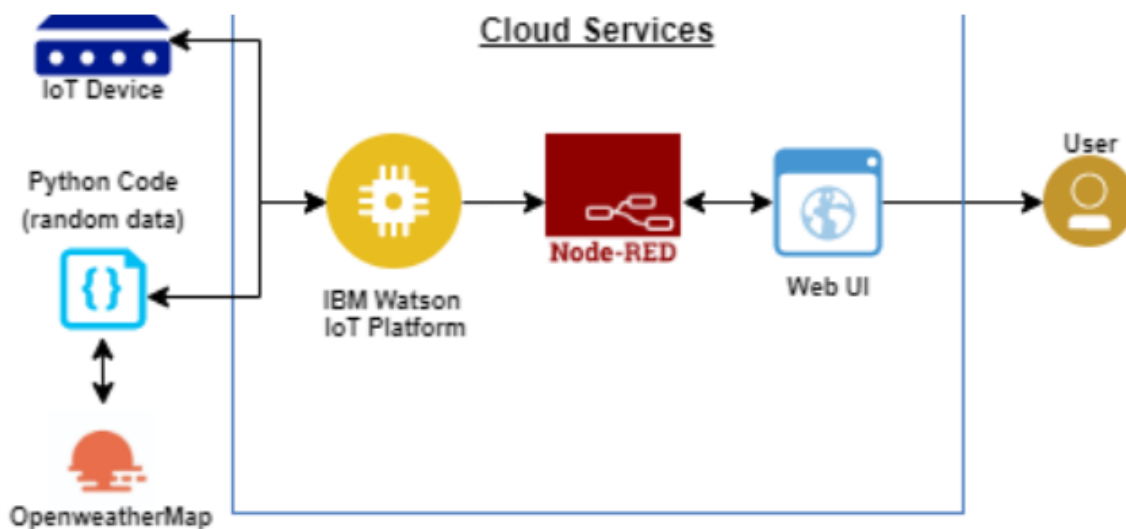
- ✓ **IoT Device:** This device acts as sensor which sends data to the cloud about the traffic.
- ✓ **Python Code:** Generates random data based on the weather data received from the open weather map platform.
- ✓ **Open weather Map:** This works as an API which provides global weather for any geographical location.
- ✓ **IBM Watson IoT Platform:** It works as a cloud service which receives data from both the IoT device and Python code and configures the Web UI based on the received data.
- ✓ **Node-RED:** It works as a connector between the cloud and the web UI to transfer the received sensor data to web UI.
- ✓ **Web UI:** Based on the received data from Node RED the required message or symbol is displayed.
- ✓ **User:** Based on the data the user can decide regarding the follow through action.