**PROJECT DESIGN PHASE II**

**Technology Stack (Architecture & Stack)**

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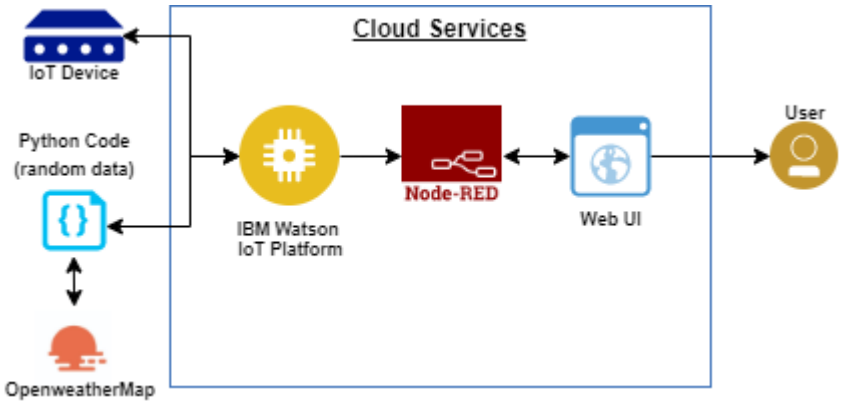
|---|---|
| **Date** | **16 October 2022** |
| **Team id** | **PNT2022TMID42239** |
| **Project name** | **Signs with smart connectivity for better road safety** |
| **Maximum marks** | **4 marks** |

**TECHNICAL ARCHITECTURE**




**GUIDELINES:**

- To replace the static sign boards ,smart connected sign boards are used
- These smart connected sign boards get the speed limitations from a Web app based on the weather API and update continuously.
- Based on the traffic and fatal situations the diversion signs are displayed.
- Based on the weather changes the speed limit may vary.
- Signs are displayed according to the school ,hospital and restaurant site .

**Table 1 : Components and Technology**

| SI.NO | COMPONENT | DESCRIPTION | TECHNOLOGY |
|---|---|---|---|
| **1.** | **User interface** | How user interact with applications. Eg:.Web UI,Mobile App, Chatbot. | HTML,CSS,Python |
| **2.** | **Application logic** | Logic for a process in the application. | IBM Watson STT platform |
| **3.** | **Application logic** | Logic for a process in the application. | IBM Watson assistant |
| **4.** | **Cloud database** | Database service on cloud. | IBM DB2,IBM Cloudant etc. |

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|---|---|---|---|
| **5.** | **External API-1** | Purpose of External API used in the application. | IBM Weather APIetc. |

**TABLE 2: APPLICATION CHARACTERISTICS:**

| SI.NO | CHARACTERISTICS | DESCRIPTION | TECHNOLOGY |
|---|---|---|---|
| **1.** | **Security implementation** | Data displayed will be under control ,no one can have access without authentication. | Firewall,Firebase,Cyber resiliency strategy. |
| **2.** | **Scalable architecture** | More feature can be added in future and more sensors will be added which helps in the security purpose . | IoT |
| **3.** | **Availability** | This project is designed with 24 hours availability and the developer can have access anywhere at anytime. | IBM Cloud |
| **4.** | **Performance** | The performance will be more accurate with continuous updation of data to the relevant situation. | IBM Cloud |