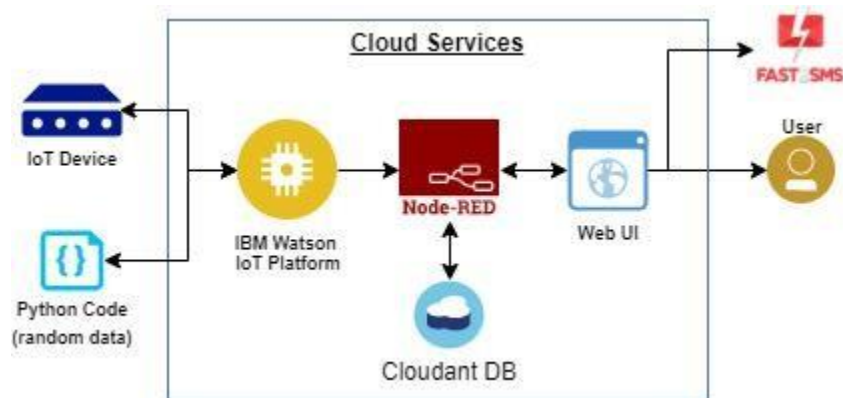


Project Design Phase-II Technology Stack (Architecture & Stack)

| | |
|---------------|--|
| Date | 22 October 2022 |
| Team ID | PNT2022TMID32813 |
| Project Name | Project - Industrial specific Intelligent fire management system |
| Maximum Marks | 4 Marks |

Technical Architecture:



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|----------------------------------|---|---|
| 1. | User Interface | How user interface with the Web UI | IBM IoT Platform, IBM Node red, IBM Cloud |
| 2. | Application Logic-1 | Logic for a process in the application | Python |
| 3. | Application Logic-2 | Logic for a process in the application | Ibm Watson, ibm cloudant service, ibm node-red |
| 4. | Application Logic-3 | Develop python script to publish and subscribe to IBM IoT Platform | python |
| 5. | Database | Data Type, Configurations etc. | MySQL |
| 6. | Cloud Database | Database Service on Cloud | IBM Cloudant |
| 7. | File Storage | File storage requirements | IBM Block Storage or other Storage Service or Local filesystem. |
| 8. | Infrastructure (Server / Cloud) | Application Deployment on Local System / cloud Local Server Configuration: Cloud Server Configuration: | Cloud Foundry |
| 9. | Protocol | How data exchanged on Web | HTTP |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|--|----------------------------|
| 1. | Open-Source Frameworks | Appypie app Inventor | Appypie |
| 2. | Security Implementations | IBM Services | Encryptions , IBM Controls |
| 3. | Scalable Architecture | Sensor – IOT Cloud based architecture | Cloud Computing and AI |
| 4. | Availability | Mobile , Desktop, Laptop | Appypie app |
| 5. | Performance | Detects the Fire , Temperature , Smoke | Sensors |