

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

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| Date | 15 October 2022 |
| Team ID | PNT2022TMID36617 |
| Project Name | Project - Industry-Specific Intelligent Fire Management System |
| Maximum Marks | 4 Marks |

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

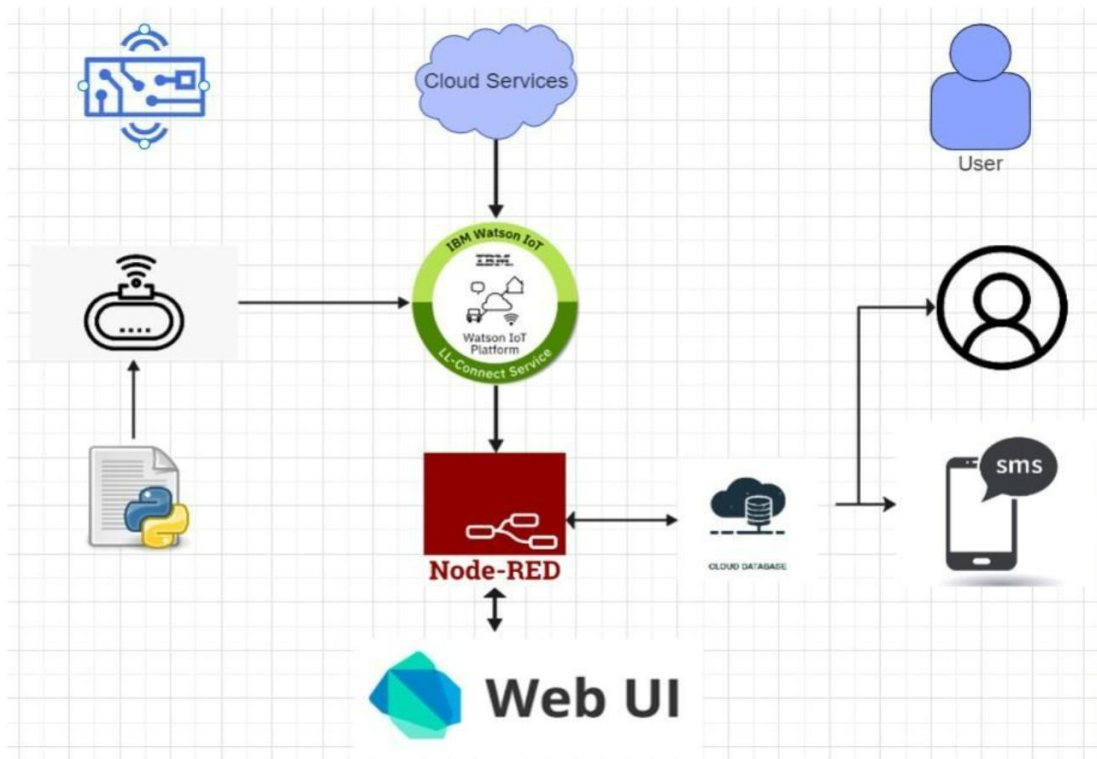


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|--|
| 1. | User Interface | How user interacts with the Web UI | App development |
| 2. | Application Logic | Logic for a process in the application | appinventor.mit.edu |
| 3. | Database | Data Type, Configurations etc. | Cloud database |
| 4. | Cloud Database | Database Service on Cloud | IBM Cloudant |
| 5. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |
| 6. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration : | Cloud Foundry |
| 7. | Protocol | How data exchanged on web | HTTP |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|---|--|
| 1. | Security Implementations | List all the security / access controls implemented. | As we are using IBMcloud, there is continuous edge-to-cloud protection for data and applications with regulatory compliance.. |
| 2. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | As we are using IBMcloud, there will be seamless and automatic scaling up of instances when more resources are required due to demand. |
| 3. | Availability | Justify the availability of applications (e.g. use of load balancers, distributed servers etc.) | This system has end-user experience monitoring, analytics and log monitoring. |
| 4. | Performance | Design consideration for the performance of the application | As we are using HTTP, for every second the data about temperature, level of gas content, flame detection are received. |