|  |  |  |  |
| --- | --- | --- | --- |
| S.No | Component | Description | Technology |
| 1. | Application Logic-1 | Logic for a process in the application | Python/Java |
| 2. | Application Logic-2 | Logic for a process in the application | IBM Watson STT service |
| 3. | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
| 4 | User Interface | User interaction and communication with application. Eg: Chatbot, Web UI, Mobile applications | HTML, CSS, JavaScript / Angular Js / React Js etc. |
| 5. | File Storage | File Storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |
| 6. | Database | Data Type, Configurations etc | MySQL, NoSQL |
| 7. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc |
| 8. | External API-1 | Purpose of External API used in the application | IBM Watson IoT Platform, etc |
| 9. | External API-2 | Purpose of External API used in the application | Fast SMS API |
| 10. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration:  Cloud Server Configuration: | Local, Cloud Foundry, Cloudant DB, etc |

**PROJECT DESIGN PHASE II: TECHNOLOGY STACK**

**COMPONENTS AND TECHNOLOGIES:**

**APPLICATION CHARACTERISTICS:**

|  |  |  |  |
| --- | --- | --- | --- |
| S.NO | CHARACTERISTICS | DESCRIPTION | TECHNOLOGY |
| 1. | Scalable Architecture | By installing more sensors in the industry, the user can also extend the range of the gas leakage monitoring system, thus resulting in a highly scalable system. | **-** |
| 2. | Performance | Fast SMS, Node RED provides real-time monitoring of sensor status. | **-** |
| 3. | Open-Source Frameworks | List of the open-source frameworks used | It lets you monitor the gas leakage system in real time from anywhere, even in faraway places. |
| 4. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | E.g.: SHA-256, Encryptions, IAM Controls etc. |
| 5. | Availability | It allows you to monitor the gas leakage system in real-time from anywhere, even in the remote places. | **-** |

**TECHNICAL ARCHITECTURE:**

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