**PROJECT DESIGN PHASE -2**

TECHNOLOGY ARCHITECTURE

| DATE | 15-10-2022 |
|---|---|
| TEAM ID | PNT2022TMID37374 |
| PROJECT NAME | Child safety monitoring system |
| MAXIMUM MARKS | 4-marks |

## TECHNOLOGY ARCHITECTURE:

- Technology architecture deals with the deployment of application components on technology components
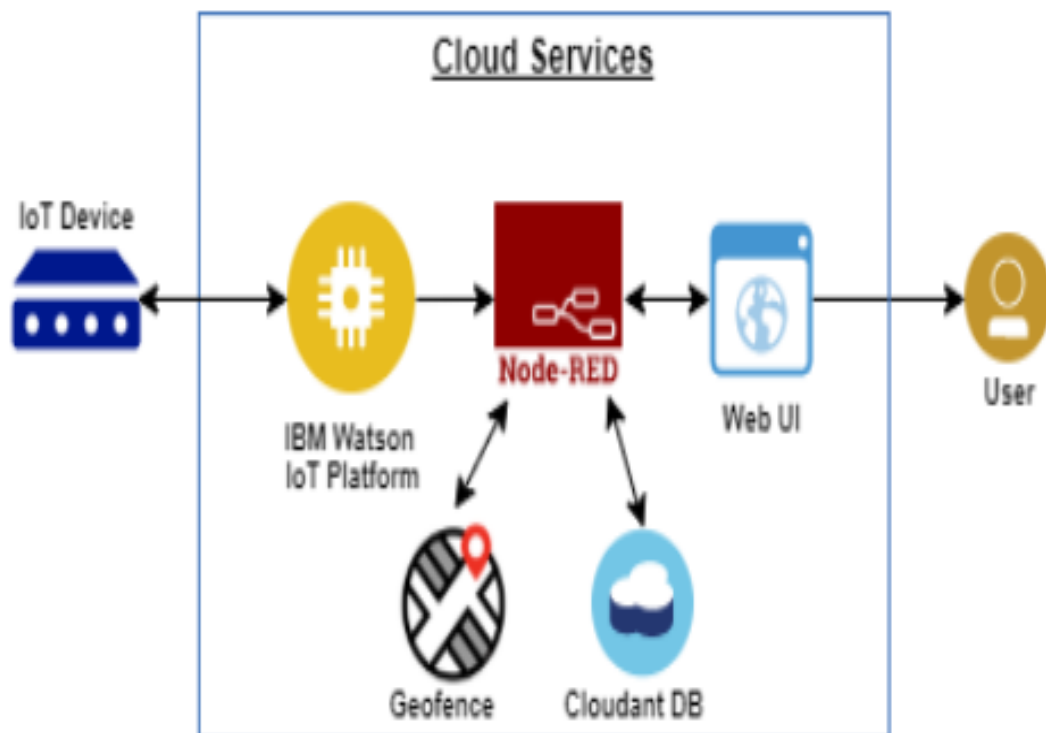
| S.No | Component | Description | Technology |
|------|-----------|-------------|------------|
| 1. | User Interface | Web UI | HTML, CSS |
| 2. | Application Logic-1 | Logic for a process in the application | Python |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Watson STT service |
| 4. | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
| 5. | Database | Data Type, Configurations etc. | MySQL |
| 6. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 7. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |
| 8. | External API-1 | Purpose of External API used in the application | Flask |
| 9. | External API-2 | Purpose of External API used in the application | Flask |
| 10. | Machine Learning Model | Purpose of Machine Learning Model | Supervised learning |
| 11. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration : | Local, IBM cloud |

**TABLE-2: APPLICATION CHARACTERISTICS:**

| S.No | Characteristics | Description | Technology |
|------|-----------------|-------------|------------|
| 1. | Open-Source Frameworks | List the open-source frameworks used | Python web frameworks |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | Technology used |
| 4. | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | Technology used |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Technology used |