# Technology Stack

## (Architecture & Stack)

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|---|---|
| *Date* | *22 October 2022* |
| *Team ID* | ***PNT2022MID52173*** |
| *Project Name* | *IoT Based Safety Gadget for Child Safety Monitoring & Notification* |
| *Maximum Marks* | *4 Marks* |

***Technical Architecture:***

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

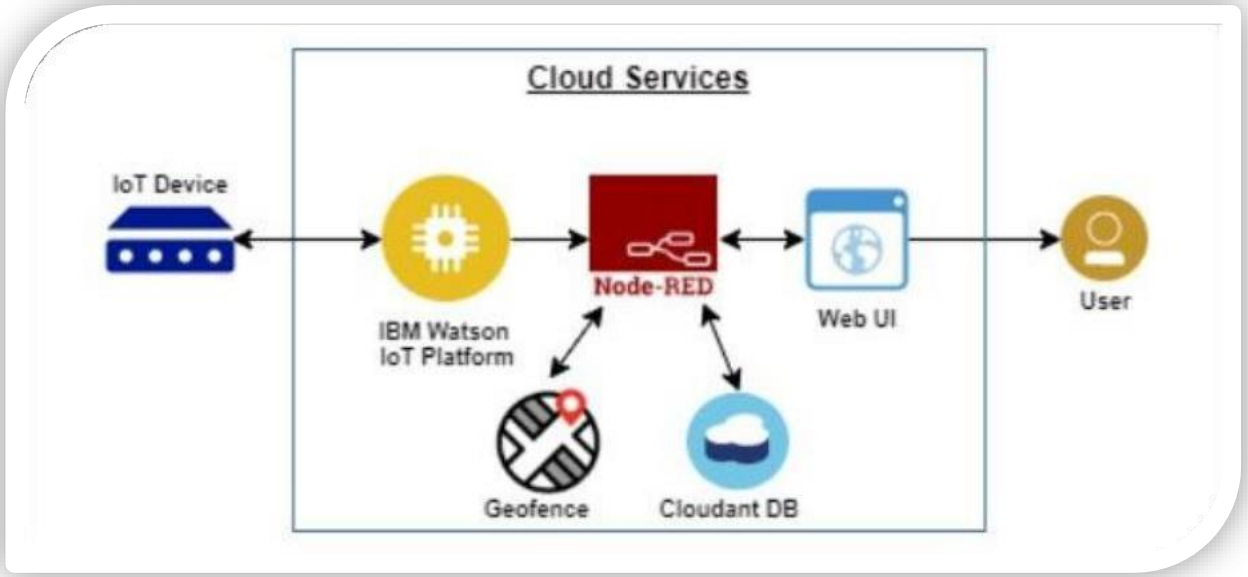

***Table-1: Components & Technologies:***

| *S. No* | *Component* | *Description* | *Technology* |
|---|---|---|---|
| *1.* | *User Interface* | *How user interacts with application e.g.,Web UI, Mobile App, Chat bot etc.* | *HTML, CSS, JavaScript / Angular Js /React Js etc.* |
| *2.* | *Application Logic-1* | *Logic for a process in the application* | *Java / 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, NoSQL, etc.* |
| *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* | *IBM Weather API, etc.* |
| *9.* | *External API-2* | *Purpose of External API used in the application* | *Aadhar API, etc.* |
| *10.* | *Machine Learning Model* | *Purpose of Machine Learning Model* | *Object Recognition Model, etc.* |
| *11.* | *Infrastructure (Server / Cloud)* | *Application Deployment on Local System / Cloud*<br>*Local Server Configuration:*<br>*Cloud Server Configuration:* | *Local, Cloud Foundry, Kubernetes, etc.* |

***Table-2: Application Characteristics:***

| ***S. No:*** | ***Characteristics*** | ***Description*** | ***Technology*** |
|---|---|---|---|
| *1.* | *Open-Source Frameworks* | *List the open-source frameworks used* | *Technology of Open source framework* |
| *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 theapplication (number of requests per sec, use of Cache, use of CDN's) etc.* | *Technology used* |