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

Date	18 October 2022
Team ID	PNT2022TMID44152
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 table 1 & table 2

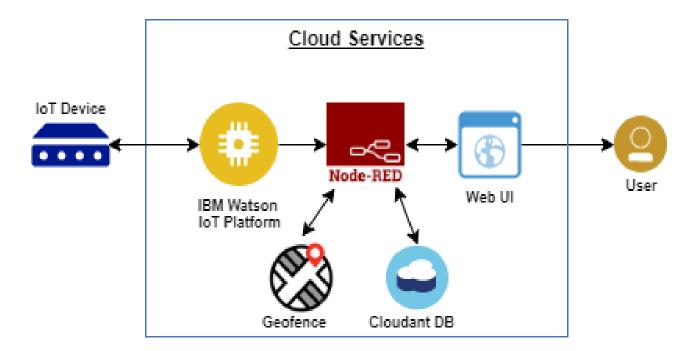


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The communication protocol being used in the proposed result might act as an interface the way like WiFi, Bluetooth and ZigBee	MIT app
2.	Application Logic	The data to be collected and sent to the authenticator's(parent) via GSM providing the GPS coordinates to easily locate access and monitor the child	IBM Watson STT service, python etc
3.	Database	Data to be segregated and secured in the form of relational DBMS	MySQL,PHP
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.	External API	To access the children location	GPS location monitoring ,etc.
7.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration.	Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	The proposed solution being framed in the form an android application providing the end user an easy inspection of their children (preferably users are parents)	UI/UX design development
2.	Security Implementations	The developed application should be accessible in the way it can only respond to the comments of the relevant users	Encryption, IAM Controls.

S.No	Characteristics	Description	Technology
3.	Scalable Architecture	The app format comes the way easier to handle and operate.	Not yet determined
4.	Availability	The developed solution tends to be available in the market at any time	Not yet determined
5.	Performance	Highly proper furthermore betterment functionalities are to be ensured in the design solution	Not yet determined