

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

Date	16 October 2022
Team ID	PNT2022TMID19925
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	4 Marks

Technical Architecture:

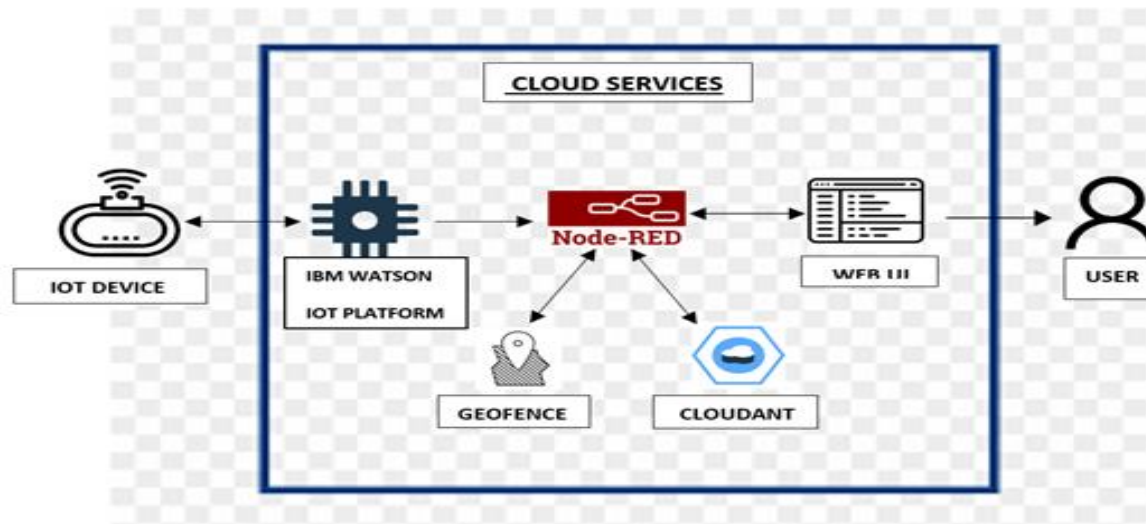


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The reporting protocol that being used in the preferred solution might act as an connection between the way like Wi-Fi, Bluetooth and ZigBee	<ul style="list-style-type: none">• MIT app
2.	Application Logic	The data to be collected and sent to the authenticator's(parent) via Global systems for mobile communication providing the GPS coordinates to easily access to the present location and monitor the child	<ul style="list-style-type: none">• IBM Watson STT service• Python, etc....
3.	Database	Data to be isolated and obtain in the form of relational DBMS	<ul style="list-style-type: none">• MySQL
4.	Cloud Database	IBM	<ul style="list-style-type: none">• IBM Cloudant
5.	File Storage	File storage requirements	<ul style="list-style-type: none">• IBM Block Storage or Other Storage Service or Local Filesystem
6.	External API-1	To access the children location	<ul style="list-style-type: none">• GPS location monitoring etc
7.	Infrastructure (Server / Cloud)	Application Deployment on Cloud Local Server Configuration /Local System	<ul style="list-style-type: none">• Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	The preferred solution being enclose in the form an android application providing the end user an easy monitoring of their children	<ul style="list-style-type: none">• UI/UX design development

2.	Security Implementations	The developed application should be within reach in the way it can only respond to the comments of the relevant users	<ul style="list-style-type: none"> • Encryptions • IAM Controls.
3.	Scalable Architecture	The app design comes the way calm 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 and betterment functionalities are to be ensured in the designed solution	Not yet determined