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

Date	18 October 2022
Team ID	PNT2022TMID43421
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
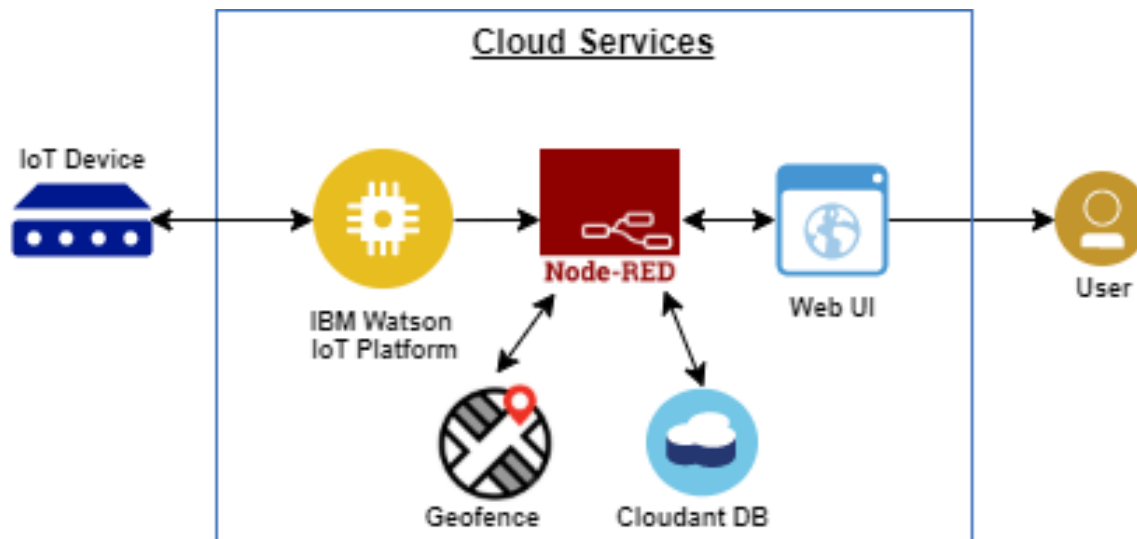
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The communication protocol being used in the proposed result might act as an interface the way like WiFi, Bluetooth and ZigBee	Node-RED
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 service, python
3.	Database	Data to be segregated and secured in the form of relational DBMS	MySQL
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.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration.	Cloud Foundry

Table-2: Application Characteristic:

S.No	Characteristics	Description	Technology
1.	Security Implementations	The developed application should be accessible in the way it can only respond to the comments of the relevant users	Encryption
2.	Scalable Architecture	The web app format comes the way easier to handle and operate.	Node-RED
3.	Availability	The developed solution tends to be available in the market at any time	We are using the geofence ,a service that triggers an action when a device enters into the set location
4.	Open-Source Frameworks	The proposed solution being framed in the form an android application providing the end user an easy inspection of their children.	UI/UX design development