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

Date	14 November 2022
Team ID	PNT2022TMID14667
Project Name	Project - IOT based safety gadget for childsafety monitoring and notification
Maximum Marks	4 Marks

Technical Architecture:

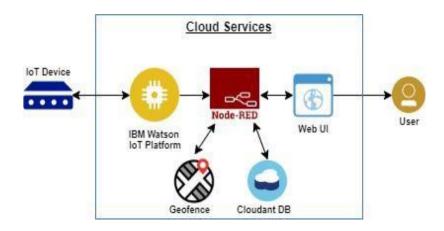


Table-1 : Components & Technologies:

S.No	Component	Description	Technology	
1.	User Interface	The communication protocol being used in the proposed solution will act as an interface similar to WiFi, Bluetooth and ZigBee	MIT App Inventor	
2.	Application Logic	The data to be collected and sent to the emergency contact (parent) via SMS providing the GPS coordinates to easily locate, access and monitor the user(child)	IBM Watson STT service, python etc	
3.	Database	Data to be segregated and secured in the form of relational DBMS	MySQL	
4.	Cloud Database	IBM	IBM Cloudant	
5.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem	
6.	External API-1	To access the user location	GPS location monitoring etc	
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / CloudLocal Server Configuration	Cloud Foundry	

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology	
1.	Open-Source Frameworks	The developed solution is to build a mobile app which provides, an secured safety to the users by creating a geofence	UI/UX design developement	
2.	Security Implementations	The developed application should be accessible In the way it can only respond to the comments of the relevant users	Encryptions, IAM Controls.	
3.	Scalable Architecture	The app format comes in a way in which user's data can be collected and updated	Not yet determined	
4.	Availability	The developed solution tends to be available in The market at any time	Not yet determined	
5.	Performance	Highly efficient and faster functionalities are to be provided in the designed solution	Not yet determined	