PROJECT DESIGN PHASE - II
TECHNOLORY ARCHITECTURE

DATE	11-11-2022
TEAM ID	PNT2022TMID36623
PROJECT NAME	IoT Based Safety Gadget for Child Safety Monitoring & Notification

Technical Architecture:

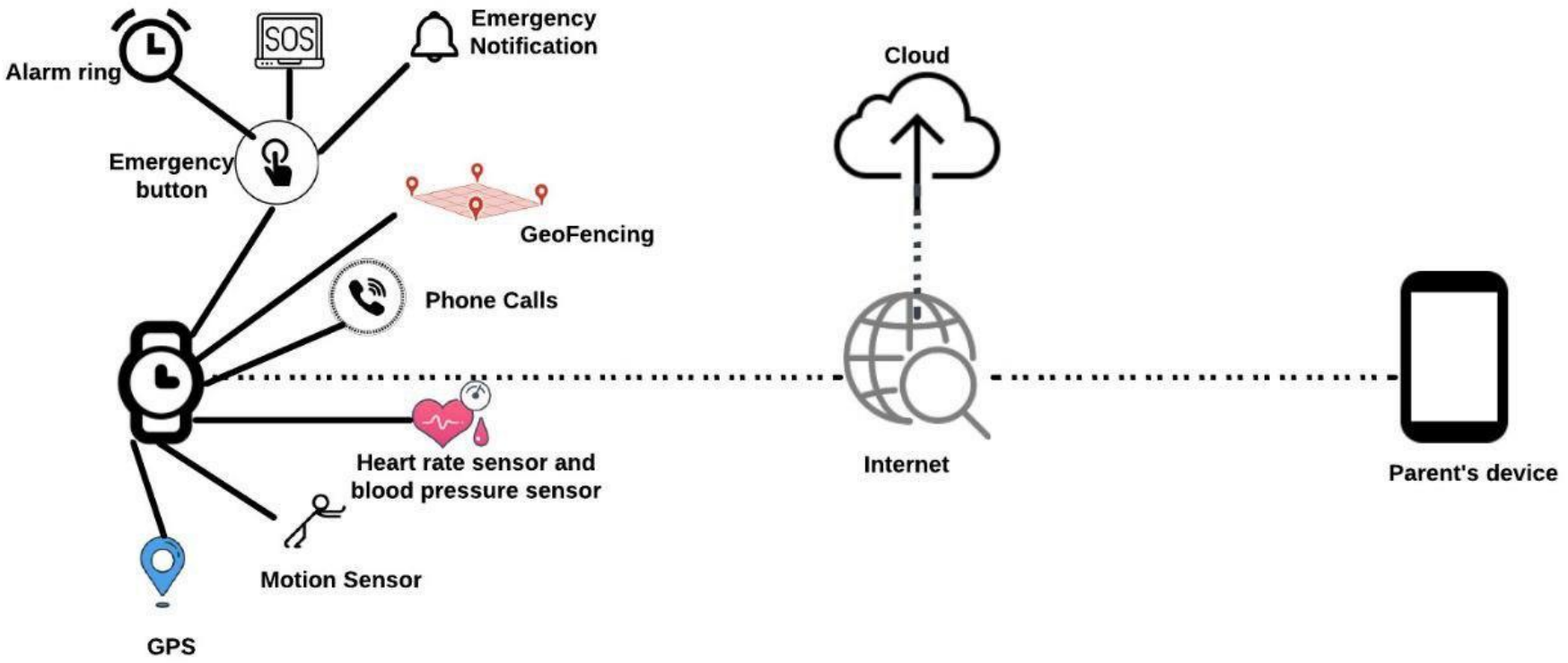

Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Web UI	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 Local Server Configuration: 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.	Python, Node-Red Dashboard, Fast SMS
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	By increasing the range of the geofence, the security area gets wider and this makes the system more scalable.	Wide range sensor are Distance sensor , proximity sensor.
4.	Availability	It allows the real time monitoring of child safety management system anywhere, even in remote areas.	Every movement will be recorded in camera .
5.	Performance	Fast SMS, Node RED provides real time monitoring of sensor status.	Update status will main important Monitoring will be use.