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

Date	1 NOVEMBER 2022
Team ID	PNT2022TMID41904
Project Name	Project - IOT Based Safety Gadget for Child Safety Monitoring and 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

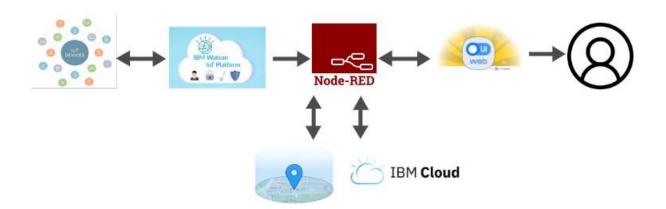


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with the application . Web UI	App development
2.	Application Logic	Logic for a process in the application	Python
3.	Database	Data Type, Configurations etc.	Cloud database
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.	Cloud/Server	1. Cloud server description2. Local server description	Cloud foundry
7.	Protocol	How data exchange on web	HTTP

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	We are using the IBM cloud, so for every instance of time it updates the current location of the children to their parents/caretakers.
2.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	The technology is used to monitor and send alert notification.
3.	Availability	Justify the availability of applications (e.g. use of load balancers, distributed servers etc.)	We are using the geofence, a service that triggers an action when a device enters a set location

S.No	Characteristics	Description	Technology
4.	Performance	Design consideration for the performance of the application	We are using HTTP, for every second the location of the children are sent to the parents.