

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

Date	20 October 2022
Team ID	PNT2022TMID19513
Project Name	Project - IOT based safety gadget for child safety monitoring and notification
Maximum Marks	4 Marks

Technical Architecture:

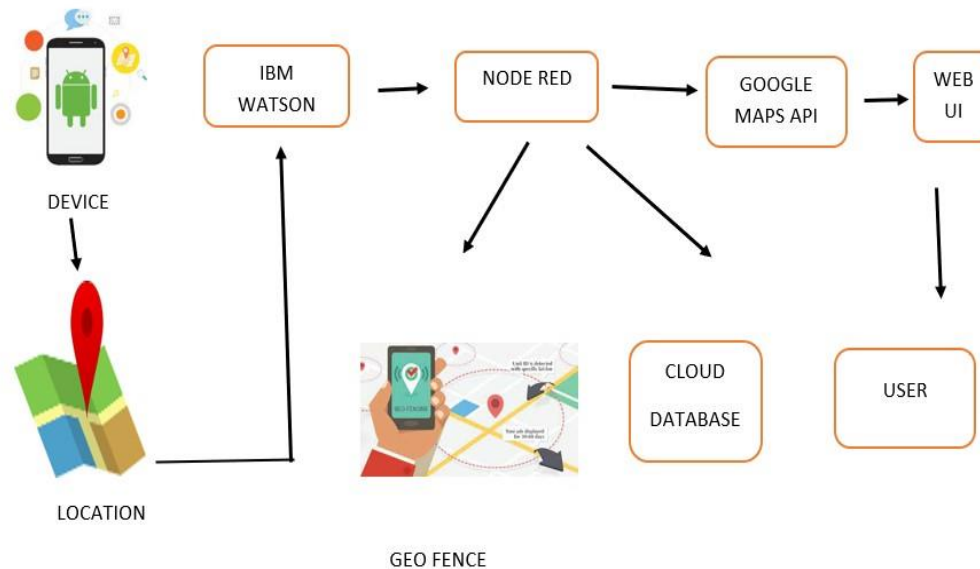


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with the device through the mobile application.	MIT app inventor.
2.	Application Logic-1	The data from the device are collected and sent to the application	IBM Watson
3.	Application Logic-2	Connect the device to the internet and the application	Node RED
4.	Database	Child's visited location history will be stored	MySQL
5.	Cloud Database	Database Service on Cloud	IBM Cloudant
6.	File Storage	File's based on the location are stored	IBM Block Storage or Other Storage Service
7.	External API-1	To create the geo fence and monitor the location	Google maps API
8.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	MIT app inventor
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Encryption
3.	Scalable Architecture	Update for the application is provided every time if an error is found	cloud
4.	Availability	The application has to be available every time without any problems	IBM cloud
5.	Performance	The device works best with good network	High speed and stable network