Project Design Phase-II

Technology Stack (Architecture Stack)

Date	21-10-2022
Team ID	PNT2022TMID23803
Project Name	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION

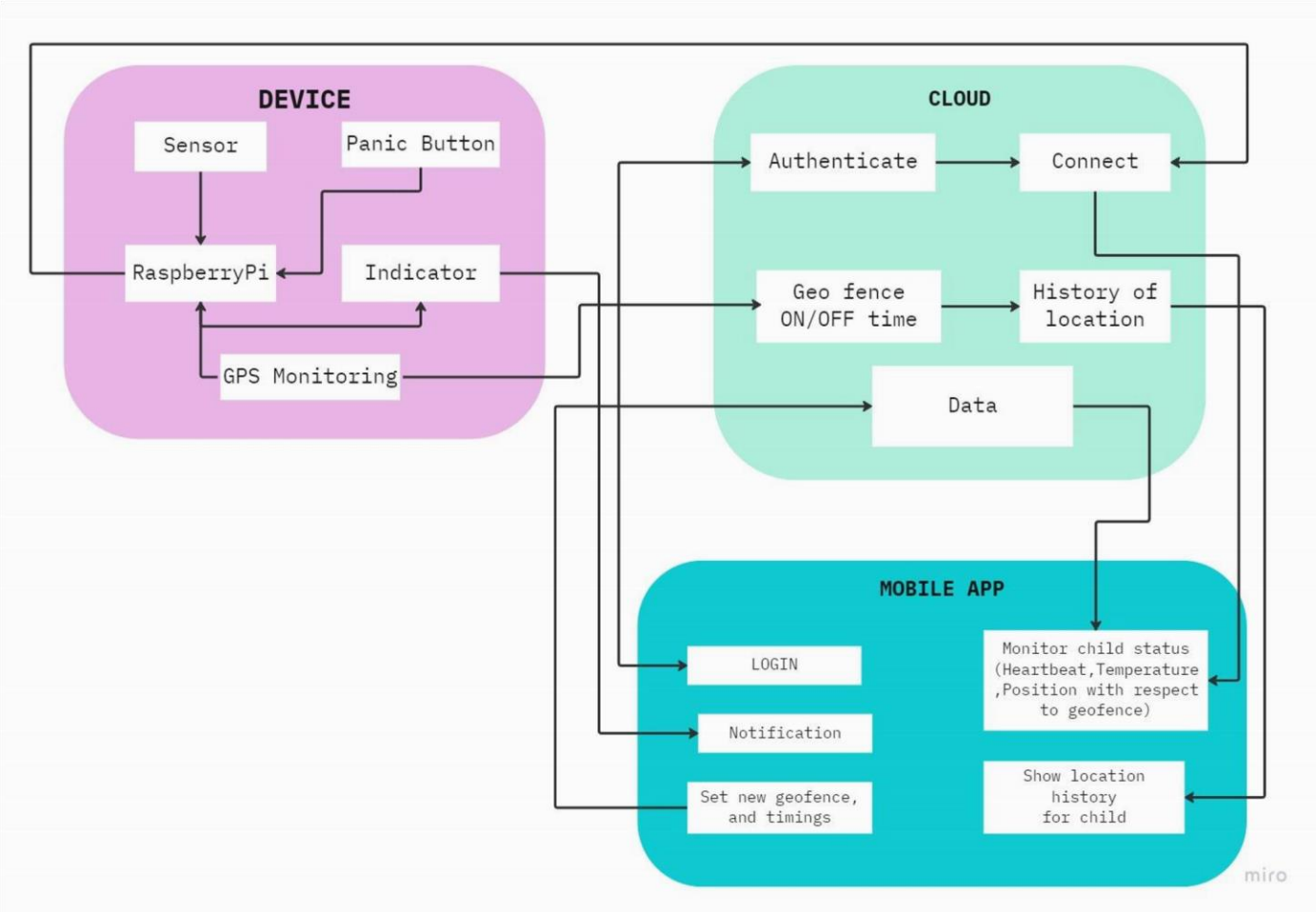

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Mobile App.	MIT app inventor
2.	Application Logic-1	Code development phase	Python
3.	Application Logic-2	Interfacing purpose	IBM Watson Assistant
4.	Cloud Database	Database Service on Cloud	IBM Cloudant
5.	File Storage	Usage of IBM Cloud Storage	IBM Block Storage
6.	Browser based flow editor	Visual programming	Node Red
7.	Infrastructure (server/cloud)	Application deployment on Local Server	Cloud Platform

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	A template for software development that is designed by social network.	IBM Watson Platform, Node Red.
2.	Security Implementations	Login and authentication protect from unauthorized entries from accessing cloud data.	IBM Cloud.
3.	Scalable Architecture	Presentation Tier (Mobile App): Mobile app will act as an interface between the parent and the device. Logic Tier (Raspberry Pi): It will get the data from the sensor and the GPS and it will send it to the cloud. Data Tier (cloud): It will store the data and send it to the mobile app.	Mobile app, Raspberry Pi, IBM Cloud.
4.	Availability	Always connected to cloud .	IBM cloud.
5.	Performance	Able to send the location of the child time to time and the sensors will send the biometrics of the child in the app.	Raspberry Pi, Mobile app.