

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

Date	29 October 2022
Team ID	PNT2022TMID01794
Project Name	Project – IoT Based Safety Gadget for Child Safety Monitoring and Notification.
Maximum Marks	4 Marks

Technical Architecture:

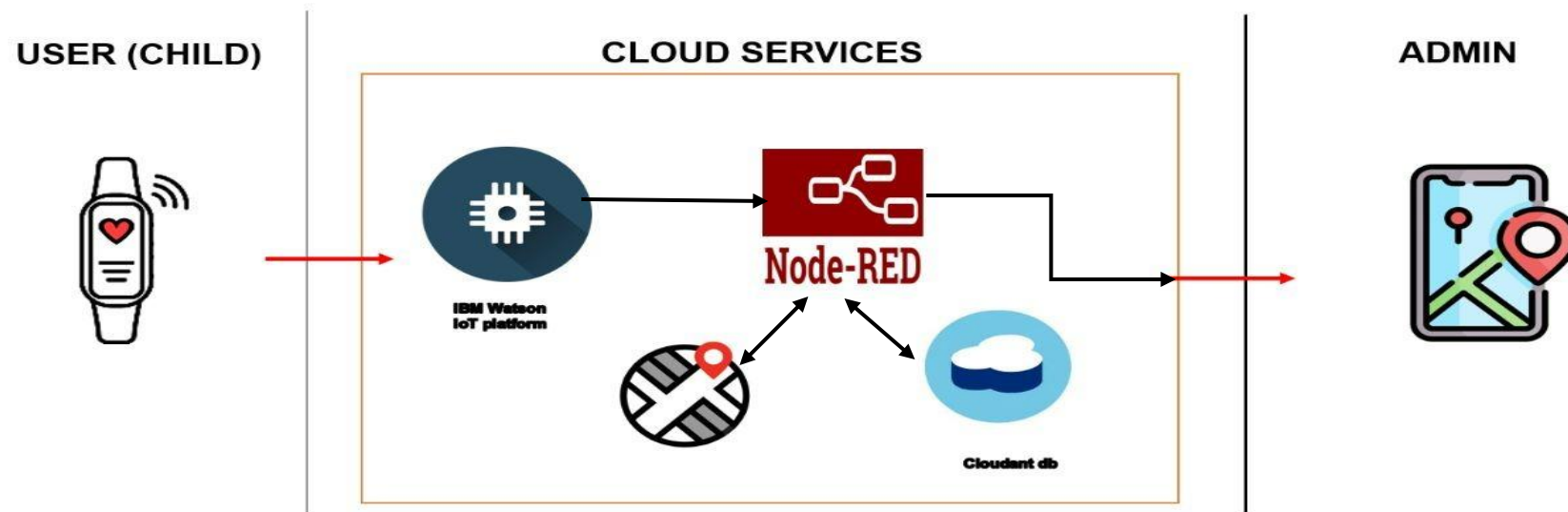


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user communication with the model is done with the help of the mobile application, where the user can control the features and gets notified for all the action done by the model.	Python
2.	Application Logic	The model consists IBMWatson lot platform whose main purpose is to communicate from main user(child) via GSM by passing the GPS coordinates information through the cloud to the control user(parent)	IBM Watson STT service ,Python
3.	Database	The entire data from the user details to user action are stored in the form of tables for easy access, manipulation, updation etc.	MySQL
4.	Cloud Database	Cloud plays the major role for storage of the consumer database. And entire consumer communication is done via cloud.	IBM Cloudant
5.	File Storage	The model is requires local cache memory for accessing the data in easier and faster way.	Local Filesystem
6.	External API-1	To access the child's location for monitoring	GPS sensor API
7.	External API-2	To connect from the main user(child) to the control user(parent) for communication.	GSM sensor API
8.	External API-3	To detect the child's heat radiation for monitoring the health and notifies depends on the pattern of the sensor.	Touch Sensor API
9.	External API-4	To detect the child's motion and movement speed to the alert the parent.	Vibration Sensor API
10.	Infrastructure (Cloud)	Application Deployment on Cloud Cloud Server Configuration	Cloud Foundry