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

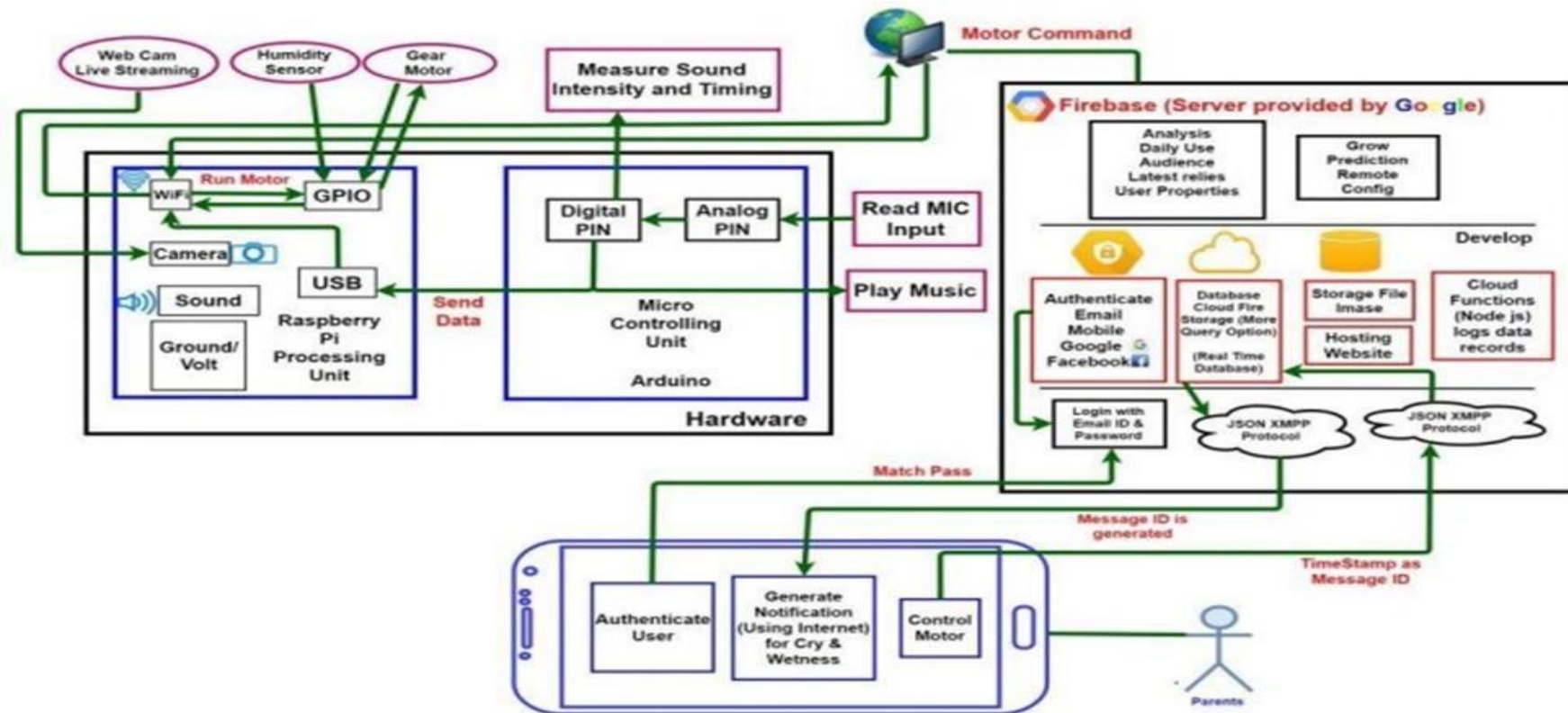| Date	16 October 2022
Team ID	PNT2022TMID29469
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification.
Maximum Marks	4 Marks

Technical Architecture:

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App.	HTML, CSS, JavaScript.
2.	Application Logic-1	Code development phase	Python
3.	Application Logic-2	Interfacing purpose	IBM Watson
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 System	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	Each and every parent should take care of their own children, without letting them fall into the dark world of abuse, which entirely ruins them physically, mentally and emotionally destroying our future. Hence, considering the importance of our future, our project makes it easy for parents to track their children and to visually monitor them on regular basis, which makes them ensure the safety of their children and reduces.	Notifications and alerts
3.	Scalable Architecture	The rate of incidents of child abuse. If any abnormal values are read by the sensor, then an SMS is sent to the parents mobile and an MMS indicating an image captured by the serial camera is also sent. The future scope of the work is to implement the IoT device which ensures the complete solution for child safety problems.	Implementation using Software

S.No	Characteristics	Description	Technology
4.	Scalable Architecture	The rate of incidents of child abuse. If any abnormal values are read by the sensor, then an SMS is sent to the parents mobile and an MMS indicating an image captured by the serial camerais also sent. The future scope of the work is to implement the IoT device which ensures the complete solution for child safety problems.	Implementation using Software
5.	Performance	GPS is useful for tracking children and GPS also provides the information where the child is currently located as well as it also informs the parents how long his child is far away from his parents. SMS services used when smart phonesdo not support internet connectivity in this case achild is able to send a text message or exact location to the parents. This system is going to help the parents to track the location of their children without informing them because their movement is displayed on the parent's phone.	GPS