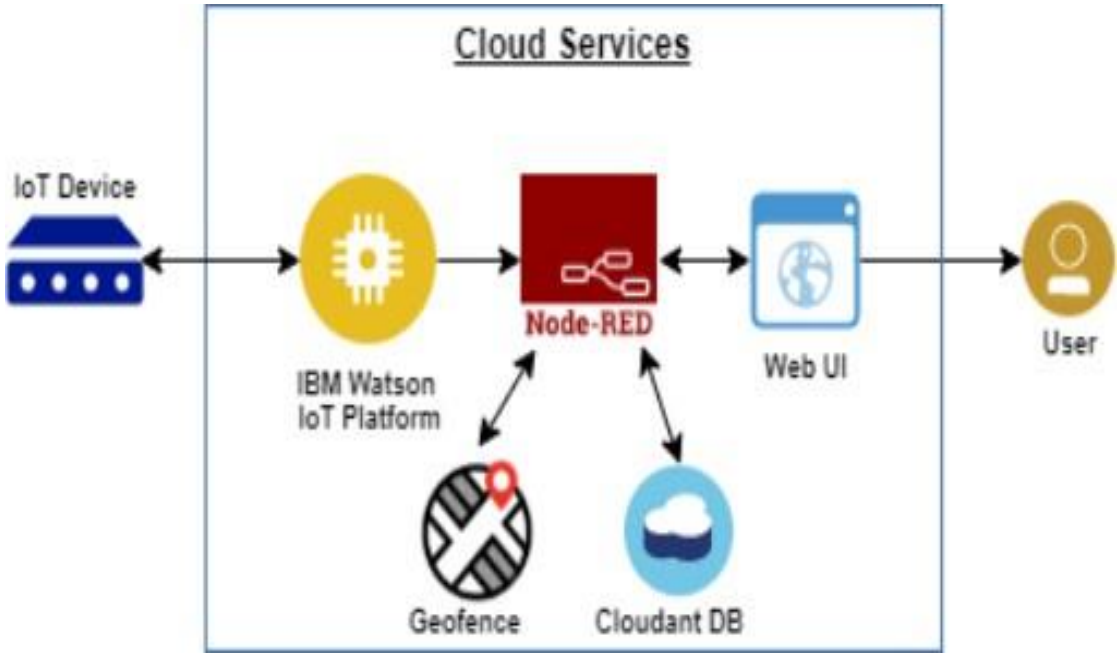
Project Design Phase-I
Solution Architecture

Date	20 October 2022
Team ID	PNT2022TMID00858
Project Name	IOT-BASED BABY MONITORING SYSTEM SURVEY USING THE RASPBERRY Pi
Maximum Marks	4 Marks

Solution Architecture:



IoT Device :

IoT devices are non-standard computing objects with wireless network connectivity and data transmission capabilities. In this case, we make use of IoT devices like buzzers, sensors, and microcontrollers for input and LED lights for output.

IBM Watson IoT Platform :

With a clear and straightforward user interface, you can easily add, manage, and regulate access to IoT devices while also keeping track of how they are being used. Here, we list every device that our application requires, keep an eye on them, and connect to the node-red platform via api calls.

Node - RED :

Node-RED is a programming tool for creating novel and intriguing connections between hardware, APIs, and web services. It is a low-code platform that allows for simple application creation by drag and drop. Without concern for the internal workings of our programme, we may continue to

add functionality.

Geofence :

A geofence is a digital boundary around a physical location. Geo worlds may be generated dynamically or in accordance with a predetermined set of boundaries. In our application, the parents use node-red to generate the geo fence.

Cloudant DB :

An IBM software product called Cloudant is primarily offered as a cloud-based service.A distributed, non-relational database service by the same name is called Cloudant. The datastore used by this application to store all of its data is called Cloudant DB.

Web UI :

Every internet-connected gadget can communicate with one another over the web. Our application's Web UI layer allows users to communicate with their devices, watch their children, view their child's location history, and view the upcoming and current weather conditions there.

User :

Users who are in charge of supervising the child may be parents or other guardians.