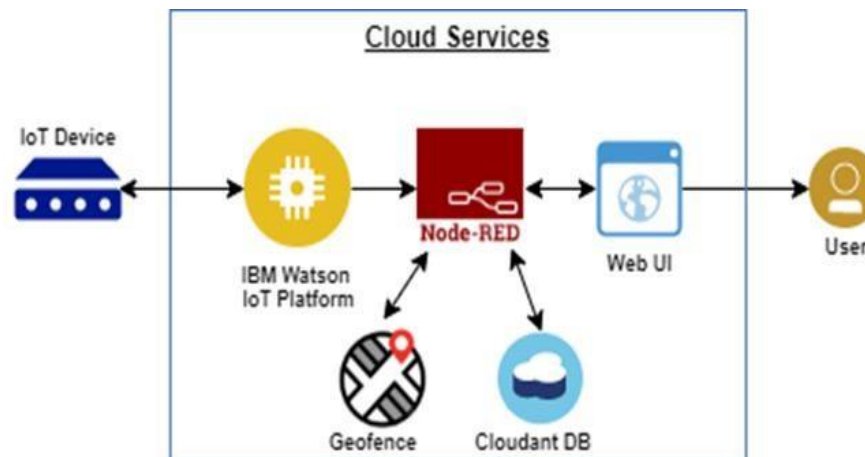


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Date	15 October 2022
Team ID	PNT2022TMID46774
Project Name	IoT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	4 Marks

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework

2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
3.	Scalable Architecture	The App used for Access the Gadget is limited to Support 100 , 000 Users at a time. And little Slow for others come After 100 ,000 and the first batch finish can move fastly in their Work.	Technology used
4.	Availability	The Gadget is Off only if the Charge is dead, Otherwise can 't off the Device by Anyone ,And it is 24hour Stability for Charge Usage, once Charged fully.	Technology used
5.	Performance	The load time for any Action is no more than 3 Seconds for Users that access the Work using an High Network Speed.	Technology used

#### References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture> <https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>