

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

Date	2 November 2022
Team ID	PNT2022MID42281
Project Name	Smart Solutions for Railways
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2.

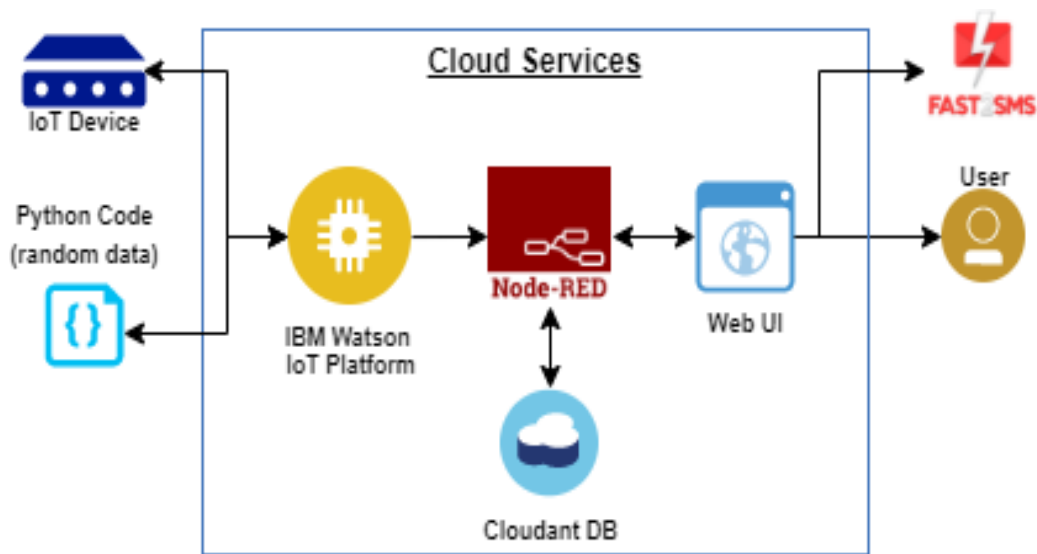


Table -1: Components & Technologies:

S.NO	Component	Description	Technology
1.	User Interface	Interaction between user and application	Python
2.	Application logic- 1	Get input from the user and store it	Python
3.	Application Logic -2	Datas are stored in the cloudant DB	Cloudant DB -cloud storage

4.	Database	No STRUCTURED QUERY LANGUAGE OR ANY OTHER DBMS is used to store the user data in the database	IBM Cloudant DB
5.	Cloud Database	All the database are stored in the cloud	IBM Cloudant DB -cloud storage
6.	File Storage	The mobile app must have at least of 10MB space	Local file system
7.	External API-1	Grouping of all the iot devices	IBM Node Red
8.	Infrastructure (server, cloud)	Application deployment on local system/cloud local service configuration or cloud service configuration	Local, IBM Watson cloud

Table-2: Application Characteristics:

S.NO	Characteristic	Description	Technology
1.	Open-source Frameworks	NODE-RED	Node.js
2.	Security Implementations	Individual datas of the client are stored safely in Db by giving specific Id	Cloudant DB
3.	Scalable Architecture	Easily accessible website with high reliability	Cloud and data centres, gateways, sensors
4.	Availability	The webpage is available and accessible at all times	IBM Cloud
5.	Performance	No server crash or server down even many numbers of users access the website at the same time.	IBM Watson