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

Date	03 October 2022
Team ID	PNT2022TMID12354
Project Name	Smart Solutions For Railways
Maximum Marks	4 Marks

Technical Architecture:
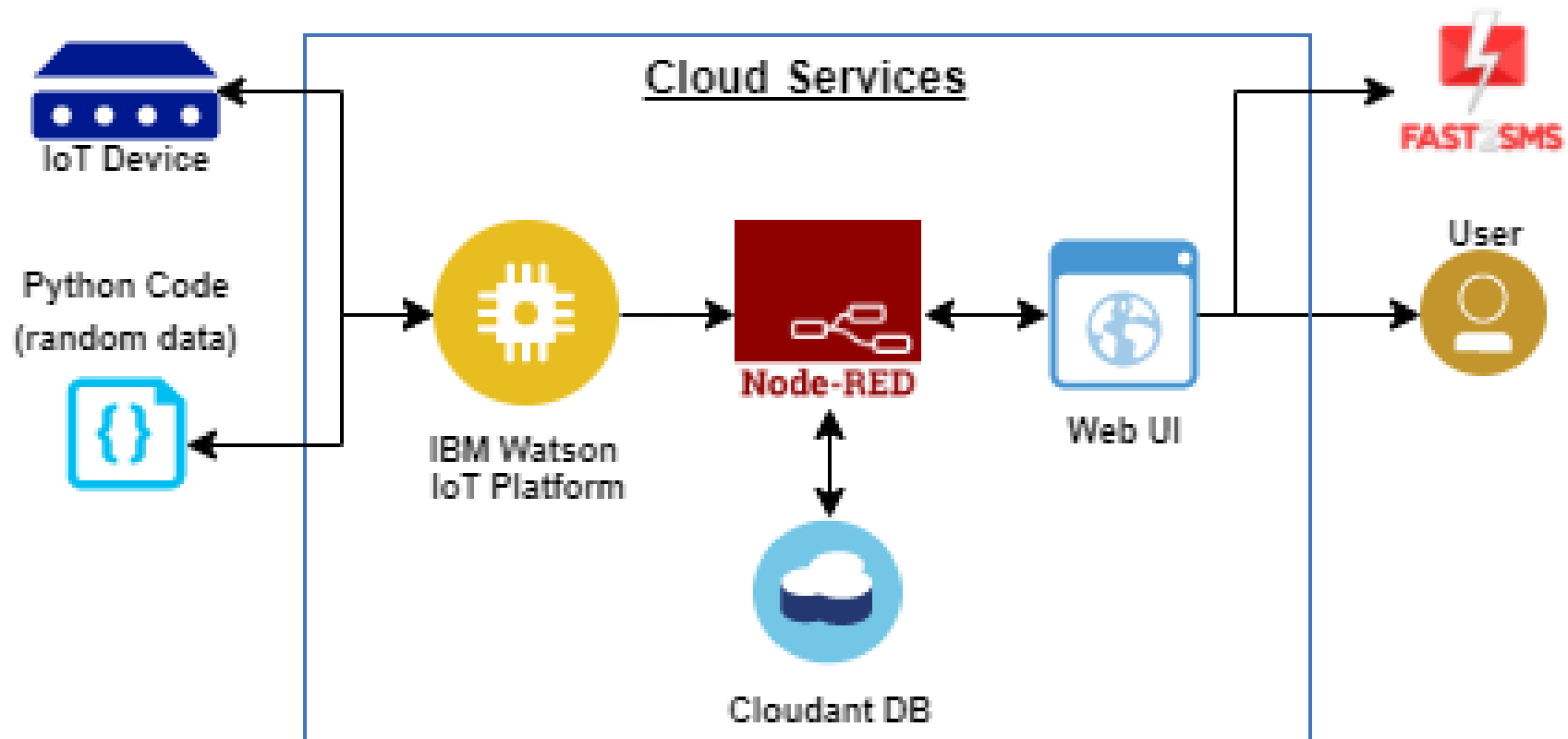
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with the web application through this particular technology	Node Red , MIT app inverter etc
2.	Application Logic-1	To develop a script for Ticket booking with GPS monitoring system.	Python
3.	Application Logic-2	In order to access the cloud platform	IBM Watson service
4.	Application Logic-3	To build conversational interface with any application and devices.	IBM Watson Assistant
5.	Cloud Database	To store the data in the cloud service	IBM DB2, IBM Cloudant etc
6.	External API-1	To monitor the location of the train in the app	IBM MaaS360
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration	Local, IBM cloud , etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	In order to avoid the third party access to the application.	Encryption ,One time password protection etc
2.	Availability	Using of available servers and technology	Cloud servers eg: IBM cloud and services
3.	Performance	Different systems are used to represent multiple performance of the application.	Using of systems eg : GPS, QR readers.