Project Design Phase-I
Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID23442
Project Name	Project - SMART SOLUTIONS FOR RAILWAYS
Maximum Marks	4 Marks

Solution Architecture:

1.If a passenger wants to reserve ticket(s), firstly, he/she has to log in to the Railway system with valid credentials. Then, the passenger has to provide his/her details with the date of the journey, names of the passengers and their details, origin station details, destination station details, and the class type of the required ticket(s).

2.The Railway Reservation System will provide the available Train-list, and Seat-availability, via-details.

3.To book a ticket passengers can pay through online/offline mode. After successful payment of the ticket fare the System will generate the ticket and PNR no. will be given to the passenger. The System also keeps the payment details and sends them to the system Admin.

4.The Passenger can check PNR status (confirmed, RAC, waiting list) by entering the PNR no. into the Reservation system.

5.The Reservation system should store all train details, fare details (by zone, class, and date wise), PNR no, date of trains, etc. This maintenance should be controlled by the Admin.

6.The System also has refund rules which have a date of reservation, ticket fare, and refundable percentage. The passenger can simply cancel the ticket(s) by entering the PNR no and a cancel ticket request. After cancelation, the Admin will pass the refundable amount to the System and the System will give the refundable amount to the passenger.

Example - Solution Architecture Diagram:

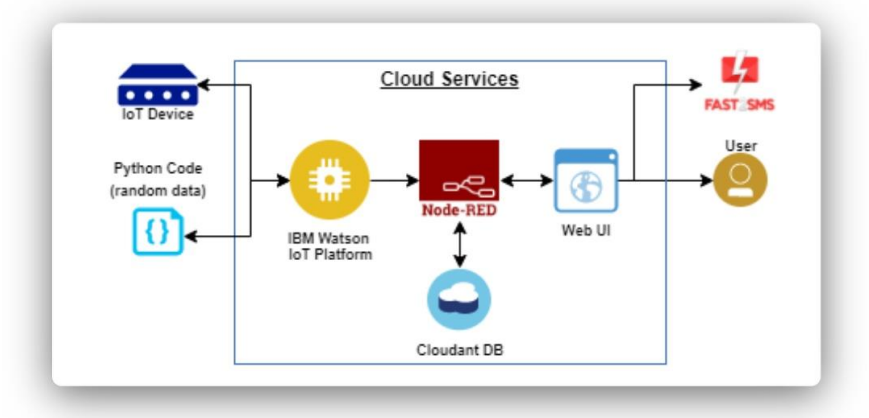

Figure 1: Architecture and data flow of the smart solutions for railways