Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID25456
Project Name	Smart Solutions For Railways
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through online web portal
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Ticket Booking	Availability of seats payment interface Ticket generation with unique id QR code generation
FR-4	Ticket Validation	Login page for TTE Scanning the qr code Validation of the ticket
FR-5	Train location tracking	Fetching the location of the train using gps Sending the data to the end point

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The tickets can be booked easily using the web app by checking the seat availability, The TTE should be able to validate the tickets by scanning the qr code
NFR-2	Security	The application should be more secure by using otp confirmation and secure methods for communication
NFR-3	Reliability	The train location displayed in the web app should be accurate and the application should accept all kinds of payment methods.
NFR-4	Performance	Though many number of users try to book the ticket concurrently the server should be able to server all the users without crashing
NFR-5	Availability	The ticket booking should have almost 100% uptime for the user to book the tickets without any issues and distribute the live status of the train
NFR-6	Scalability	The system should be able to process the location of all the train every second