

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

Date	19 October 2022
Team ID	PNT2022TMID37898
Project Name	IoT – Smart Solution 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	Web application	<ul style="list-style-type: none">▪ User friendly environment▪ Efficient Database Connectivity▪ Resistance to network issues
FR-2	Ticket Booking	<ul style="list-style-type: none">▪ Information about seat availability▪ Appropriate price details▪ Easy payment options.
FR-3	Booking Confirmation	<ul style="list-style-type: none">▪ Unique QR Code generation▪ Quick Response▪ Good Connectivity with Cloud Database
FR-4	Ticket Checker(Passenger identification)	<ul style="list-style-type: none">▪ QR Code Scanner▪ Quick response from portal
FR-5	GPS Module	<ul style="list-style-type: none">▪ Sharing live location of train▪ Service without any interption

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Finest web application that allows users to make booking based on the availability.
NFR-2	Security	For each booking unique QR Code is generated
NFR-3	Reliability	Highly reliable since the unique QR Code generated helps to make proper evaluation of ticket booking.
NFR-4	Performance	Better performance compared to ordinary ticket booking system as cloud database

		is used the server provides wide range of service without any lagging in the system
NFR-5	Availability	Service provided by cloud database – establishes a wider range of availability of services.
NFR-6	Scalability	Better scalability since the tracking of live location is possible for all the passengers throughout their journey. Better service scalability – in case of both ticket booking and ticket evaluation system.