

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

Date	6 November 2022
Team ID	PNT2022TMID22240
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 Gmail Registration through Mobile number.
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via Message.
FR-3	Journey details	Provides From and To information and date of travel and seat.
FR-4	Select Trains	Select the appropriate trains among the list and also based on the seat availability, time, date of travel.
FR-5	Book and add passenger	Fill the essential details such as name, contact details and age, government ID.
FR-6	Proceed to pay	Select an appropriate payment options among UPI, Internet banking, credit card, debit card.
FR-7	Ticket confirmation and Invoices	Ticket confirmation status is send to their registered email id or phone number.
FR-8	Database management	Entire Journey details will be stored in the server.
FR-9	Features Of Railways	Loyalty Program design,email,SMS,or in-app notifications,multiple payment options integration,easy rebooking and cancellation capabilities.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	In hardware site,smart sensors detect problems in tracks,GPS detects live location of the train.
NFR-2	Security	It protects the details of a passenger against man in the middle and denial of service attacks.
NFR-3	Reliability	It enables the user to securely use the app which provides maximum trust to the user.
NFR-4	Performance	The application is more secured and it will obtain through the backend no unauthorized can access the application.
NFR-5	Availability	With the availability of QR code at stations,passengers can now purchase their paperless ticket online without having to stand in queue saving time and energy.
NFR-6	Scalability	Application is very much scalable and many users can operate without crash especially during booking and tatkat tickets.