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

Date	03 October 2022
Team ID	PNT2022TMID00231
Project Name	Project – 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 Ticket Registration	Registration through Official website Registration through Form Registration through App
FR-2	User Ticket Confirmation	Confirmation via QR code Confirmation via message
FR-3	Ticket Verification	Ticket collector check the tickets using the QR code which is generated during ticket booking.
FR-4	TTE work load reduction	TTE can simply scan the QR code to identify the personal details and also to reduce the use of paper.
FR-5	Database Storage	All the booking details of the customer is stored in the database with unique ID which can retrieved back when the ticket collector scans the QR code.
FR-6	Train Tracking	The live status of the journey is updated in the web continuously

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The user can easily book the tickets at their own pace based on the availability of seats without waiting in the ticket counter.
NFR-2	**Security**	User's personal details are safely stored in the Cloud. QR code reduces the duplicate train tickets.
NFR-3	**Reliability**	As IBM cloud is used to store the information about the customers this product is highly reliable.
NFR-4	**Performance**	The Web UI provides smooth user experience and improves the performance of this solution.
NFR-5	**Availability**	App is readily available on play store for mobile phone users or user can access the website using web browser.
NFR-6	**Scalability**	This solution can be easily scaled up based on the customer demand.