Project Design Phase-II

Functional Requirements

Date	29 October 2022
Team ID	PNT2022TMID26706
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	*Passenger Registration*	Application-based Registration with the Required Information
FR-2	*Passenger Login*	Use the unique username and complementary password to Log In
FR-3	*Admin Login*	Login Using the Admin Username and Password
FR-4	*Passenger Books Ticket*	By providing the necessary details, one books a ticket through an app.
FR-5	*Selecting the Seat*	While booking passenger should select which seat is comfortable for him/her.
FR-6	*QR Code Generation*	A QR Code is generated following a successful booking
FR-7	*Admin Cancel the Booking*	Admin may cancel a passenger's ticket if the information is unsuitable or the passenger is thought to be inappropriate.

FR-8	*Tracking the location of Train*	Passenger can view the current location of his/her Train.
FR-9	*TTR Verifies the Passenger*	TTR scans the QR Code that the user displays, providing the user with information that needs
		to be confirmed.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	*Usability*	The application is simple enough for users with little experience using mobile devices.
NFR-2	*Security*	Only the system's data administrator is able to modify the access rights for a given piece of system information.
NFR-3	*Reliability*	When any update fails, the database update procedure must roll back any linked updates.
NFR-4	*Performance*	For visitors who use an LTE mobile connection to view the website, the front page load time must be under 2 seconds.
NFR-5	*Availability*	The deployment of a new module shouldn't affect the accessibility of the main page, the product pages, or the checkout pages, and it shouldn't take more than an hour. The rest of the pages that might encounter issues must present a notice with a countdown indicating when the system will be back up.
NFR-6	*Scalability*	The maximum number of visitors to the website must be expandable to accommodate 10,000 users at once.