

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

Date	15 October 2022
Team ID	PNT2022TMID13941
Project Name	IOT based smart crop protection system for agriculture
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 Gmail Registration through Facebook Registration through Mobile number
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via call
FR-3	Journey details	Provides From and To information and date of travel.
FR-4	Select Trains	Select the appropriate trains among the list and also based on the seat availability.
FR-5	Book and add passenger	Fill the essential details such as name, contact details age, sex.
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.
FR-8	GPS	Tracking the live location and the status will be updated to the passengers.
FR-9	GSM	To get a wakeup call alarm prior before the destination is reached.
FR-10	Database management	Entire Journey details will be stored in the server.
FR-11	E-catering	Foods are available for the registered passengers in an effective manner.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Availability of e-tickets with QR generation instead of physical one.
NFR-2	Security	It protects the details of a passenger against eavesdropping 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	No server down problems , many user can access at same the same time. Better performance is provided.
NFR-5	Availability	Accessibility through website or application anytime and from anywhere.
NFR-6	Scalability	No of users concurrently interacting with our web application with higher reliability.