

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

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| Date | 15 October 2022 |
| Team ID | PNT2022TMID08702 |
| 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 Gmail 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 option among UPI, Internet banking, credit card, debit card. |
| FR-7 | Ticket confirmation and Invoices | Ticket confirmation status is sent 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 hygienically. |

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. |

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|-------|---------------------|---|
| 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. |