

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

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|---------------|--|
| Date          | 10 October 2022                                  |
| Team ID       | PNT2022TMID11042                                 |
| Project Name  | Project – IOT based 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 Requirements             | Ticket Booking through Seat availability<br>Unique ID verification using QR code        |
| FR-2   | User Registration             | Manual Registration<br>Registration through webpage<br>Registration through Application |
| FR-3   | User Confirmation             | Confirmation via Phone<br>Confirmation via Email<br>Confirmation via OTP                |
| FR-4   | Payment options               | Direct cash payment<br>Net Banking/UPI<br>Credit/Debit/ATM Card                         |
| FR-5   | Service Feedback              | Through Webpage<br>Through Phone calls  |

**Non-functional Requirements:**

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

| FR No. | Non-Functional Requirement | Description   |
|--------|----------------------------|---|
| NFR-1  | <b>Usability</b>           | Should be easy for the customers to book the tickets by seeing the seat availability.<br>Even senior citizens should not find any difficulty in ticket booking. |
| NFR-2  | <b>Security</b>            | Application has to be secured with 2 step authorisation Passwords and passkeys will be assigned as per the users need.  |
| NFR-3  | <b>Reliability</b>         | Software should be updated periodically.<br>Required measures should be taken during server failure.  |
| NFR-4  | <b>Performance</b>         | The Web application must have a good user interface.<br>Payment should also be simpler and faster.  |
| NFR-5  | <b>Availability</b>        | All the features will be available when the user requires and customization has to be done according to the user preference.                                    |