**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| --- | --- |
| Date | 21 October 2022 |
| Team ID | PNT2022TMID52749 |
| Project Name | Smart Solution for Railways |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| --- | --- | --- |
| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Download the application.  Registration through Gmail  ID / Verification process  Link their Bank accounts. |
| FR-2 | User Confirmation | A confirmation mail stating “Successfully Registered” is sent after the registration process. |
| FR-3 | Global Positioning System | Using GPS module, the user can identify the current location of the train in case of delay/emergencies. |
| FR-4 | QR Code | The QR code is sent through the mail to the user for ticket confirmation. |

**Non-functional Requirements:**

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

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| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | People need not have to stand in long tiring lines instead they can book tickets through our online application with ease. |
| NFR-2 | **Security** | The application we are designing is secured for people to give their login credentials / ID’s for verification purposes. |
| NFR-3 | **Reliability** | We are creating this app which will serve as a time saver for millions of people who can book tickets to their destination on the go. The app also has advantages like GPS tracking module, QR code for verification. |
| NFR-4 | **Performance** | The ticket booking confirmation is sent through a mail with the QR code along with the link for live location tracking of the train. |
| NFR-5 | **Availability** | The application which we are designing is user friendly. |
| NFR-6 | **Scalability** | Using IBM Watson IOT Platform the web application is connected to the IOT devices which ensures security of the application. |