## Efficient and Secure Operation with Better Passenger Experience: TEAM ID:PNT2022TMID14953

With continuous waves of urbanization, it is required that operation of the rail transit system be more intelligent and efficient. As those vehicles run in separate and closed tracks, railways entail a number of challenges and risks in terms of security and management, including engines, doors, fire control, as well as vibration and electromagnetic disturbance. Making sure everything is in good order can be a major challenge. Danger must be identified as soon as possible, as accidents mean not only revenue losses, but more importantly, life security. Meanwhile, with a large amount of time spent on the way, travel is expected to be not only convenient but also pleasant especially in the IOT era where everything can and should be connected. Better passenger experience is the key to success in the increasingly fierce market competition. Thus, a full-functional communications system is needed for rail transportation.

## **Functional requirements:**

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|------------------------------------|
| FR-1   | User Registration             | Registration through Form          |
| FR-2   | User Confirmation             | Confirmation via                   |
|        |                               | Email Confirmation                 |
|        |                               | via OTP                            |
| FR-3   | User QR code generation       | QR code is generated               |
| FR-4   | GPS tracker                   | Location is tracked                |

Data flow:

