## **Project Design Phase-I**

## **Proposed Solution Template**

Date	25 oct 2022
Team ID	PNT2022TMID45560
Project Name	Smart solution for railway system
Maximum mark	2mark

## **Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

S. No	Parameter	Description
1	Problem Statement (Problem to be solved)	Ticket reservation. All the booking details of the customers will be stored in the database with a unique ID and they can be retrieved back when the Ticket Collector scans the QR Code.
2	Idea / Solution description	Tickets booking system by using QR code scanning. A GPS module is present in the train to track it. The live status of the journey is updated in the Web app continuously. The ticket collectors can scan the QR code to identify the personal details.
3	Novelty / Uniqueness	IOT based on the system. Using IDL python program. IoT can improve the efficiency of rail travel, and the customer experience of all those who use it. Smart sensors can be used to track important assets, manage passenger flow, and enable predictive maintenance.

4	Social Impact / Customer Satisfaction	Reduce work load. Improve safety and secure. Ensuring washroom cleanliness. Using Lux sensors for safety. Predictive maintenance and CMMS. booking the train, the person will get a QR code which has to be shown to the Ticket Collector while boarding the train. Supervision systems, such as CCTVs or emergency telephones, also contribute to safety and enhanced comfort. Speed monitoring and control is another important safety application.
5	Business Model (Revenue Model)	Monitoring air quality.Monitoring ambient conditions. Strengthen safety and security with improved network and communications. Enhance passenger services to deliver an optimised railway experience.
6	Scalability of the Solution	Innovate for superior passenger experience.Increase safety and security for passengers, staff and assets.Improve operational efficiency.