Project Design Phase-I
Proposed Solution Template

Date	30 September 2022
Team ID	PNT2022TMID11066
Project Name	Project - Smart Solutions For Railways
Maximum Marks	2 Marks

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)**	• The goal of Smart Solutions for Railways is to reduce the amount of labour that users must do, as well as the use of paper, and to give real-time train location information. • People that travel quickly and have busy schedules need an online booking method. In recent years, there have been noticeably longer lines in front of the ticket booths in railroad stations. • The passenger experience is not sufficient or convenient with ticket reservations made at the counter. The passengers are trying to get tickets from ticket booths in a timely manner. They therefore choose to use online ticketing.
2.	**Idea / Solution description**	• The user can book tickets on a website, where they will also receive a QR code that they can provide to the ticket collector so that the ticket collector can scan it to retrieve the passenger's information. • By installing a GPS module inside the train, the website also displays the train's real-time positions. The journey's location will be updated consistently on the website. • The database will contain the user's booking information, which may be retrieved at any time.
3.	**Novelty / Uniqueness**	➢ The user will receive a QR code from the webpage, which will cut down on paperwork. ➢ All of the client booking information will be saved in the database with a special ID and may be retrieved when the ticket collector scans the QR Code.You may examine an interactive seat map as well.

4.	**Social Impact / Customer Satisfaction**	◆ There is no need to go to the station to book tickets, and the transaction process is made simple. One can update their online ticket booking and request a cancellation if their plans change. ◆ The consumer will receive notifications of all confirmations and cancellations through email and cell phone. ◆ In an emergency, we can quickly retrieve a doctor's passenger information.
5.	**Business Model (Revenue Model)**	• Using this application, the user can plan their trip, check the availability of a seat, examine an interactive seat map, and choose a seat that is most convenient for them. • Additionally, it makes it simple for your clients to plan trips and daily shuttles and it minimises the need to carry tickets. • Without this solution, customers would have to travel to the station to purchase tickets and would also need to carry their tickets with them to present to the ticket collector. • Customers could also view the train's current location.
6.	**Scalability of the Solution**	1. Printing Tickets is not required. 2. While handling counter tickets carefully is a must, text messages on a phone are more than sufficient. 3. By disregarding printouts, you are becoming more eco-friendly and helping to create a greener planet. 4. Tell TTR your name and that you are a passenger with a valid proof; there is no need to take your wallet out and display your ticket. 5. Booking an E-ticket instead of a counter ticket allows you to pay immediately from your bank account, making your work easier. Counter tickets required you to carry cash.