

Project Design Phase-I
Proposed Solution Template

Date	24 October 2022
Team ID	PNT2022TMID18193
Project Name	Smart Solution for Railways
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	This project deals with insecurity of the current ticket booking system , illegal passenger boarding trains that were happening so far and a slow ticket booking process. It also deals with the inaccuracy problem in location updates of trains so that people will get to know about the exact location of trains in the websites.
2.	Idea / Solution description	The key research objectives are as follows: <ul style="list-style-type: none">• The proposed system should be able to generate QR code for train tickets• The proposed system has two main goals namely QR code generation for train tickets and live location update for passengers.• Whenever the passenger books a train ticket, the corresponding QR code will be sent to the passenger's registered mail ID.• Then the passenger can verify the ticket to the TTE using that QR code.• The passenger is able to know the exact location on the website during mobility using IoT.
3.	Novelty / Uniqueness	We are going to implement the QR code system for fast ticket booking and secure verification of train tickets and also we are going to improve the working of current train location updating apps so that the exact location updates are shown in the websites.
4.	Social Impact / Customer Satisfaction	Avoidance of illegal passengers boarding in trains. Verification of tickets made simple and continuous location updates of trains on the website.
5.	Business Model (Revenue Model)	E-ticketing has a share of 12.3 percent . Along with this, IRCTC company makes most of its profit from E-tickets which provides the profit of 63% of the total revenue.

6.	Scalability of the Solution	<p>In this regard, smart solutions for railways were already proposed. Adding to this, the following features are:-</p> <ul style="list-style-type: none"> ● The webpage can handle multiple requests at a time. ● The reusability of QR codes can be improved. ● The locations of different trains are managed and monitored continuously. ● The cloud server can store details of many passengers.
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