Project Design Phase-I Proposed Solution

Date	18October 2022
Team ID	PNT2022TMID26709
Project Name	Smart Solutions for Railways
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description

1.	Problem Statement (Problem to be solved)	○ The passenger convenience in making ticket reservations through the counter is poor. ○ There will be no information about the ticket availability until all the ticket has booked. ○ The printed tickets may be erased or torn by moisture, which is a problem for the traveller. The usage of paper tickets was to blame for this. ○ The passengers will encounter the problem of being unable to reserve the preferred seat. ○ While travelling either with

		family or friends the seats were distributed randomly. So they can't interact with each other properly as they thought. • Long-haul passengers desire window seats, and issue of ticket loss has a significant impact on them. • In their busy schedule as fast roaming world public in need of online booking process. The queues in front of the ticket counters in railway stations have been drastically increased over the period of time.
2.	Idea / Solution description	• The user can book tickets using the website, where they will receive a QR code which can be scanned instead of using tickets to retrieve the user's information. • By installing a GPS module inside the train, website can also display the train's real-time positions. The journey's location will be regularly updated on the website.

		○ Additionally, the website enables users to reserve the desired seat. ○ The booking details of the user will be stored in the database which can be retrieved anytime.
3.	Novelty / Uniqueness	○ The webpage will offer the customer a QR code, which will cut down on paperwork. ○ It allows the user to reserve the preferred seat. ○ All of the client booking information will be saved in the database with a special ID which can be retrieved when the ticket collector scans the QR Code.
4.	Social Impact / Customer Satisfaction	○ There is no need going to the station to book tickets because they can be booked online, and the transaction process is also made simple. ○ One can manage online ticket booking and apply for a cancellation in case of

		any change • All confirmations and cancellations will be sent to the consumer by provided email or mobile phone.
5.	Business Model (Revenue Model)	• The user of this application can check the seat availability and they can select the seats to their convenience. • It makes the ticket booking simple for the clients to schedule daily shuttles and journeys, and it eliminates carrying around tickets. The customer can also view the train's current location. • For using the abovementioned facility, a specific amount of fees may be charged, particularly if a customer wants to reserve their preferred seat they must pay extra for an ticket.
6.	Scalability of the Solution	• Elimination of physical paper tickets becoming environment friendly and contributing for greener planet by ignoring printout.

		○ While booking ticket in counter the clients had to carry cash and while booking E- ticket you are paying through online directly from bank or payment apps which makes work more easy for the clients. ○ This reduces the wastage of the papers and the environment.