

## Project Design Phase-I Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID54425
Project Name	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)	Lack of services provided by which customer can book tickets and ticket collector can verify tickets as paperless entries.
2.	Idea / Solution description	Our solution is to build a one-stop web application that has the following features: <ul style="list-style-type: none"> <li>• Book train tickets through online</li> <li>• QR code based verification of tickets</li> <li>• Track live location of the train</li> <li>• Alerting the passengers before train reaching the destination location</li> </ul>
3.	Novelty / Uniqueness	Our solution is unique because of the following reasons: <ul style="list-style-type: none"> <li>• Verification of tickets is done using dynamic QR code</li> <li>• One-stop solution for all of the services mentioned in solution description</li> </ul>
4.	Social Impact / Customer Satisfaction	Customers would definitely be satisfied with our solution as it: <ul style="list-style-type: none"> <li>• It is hassle free and paperless train ticket booking</li> <li>• The solution enables faster verification of tickets</li> <li>• The solution gives precise or approximate location of trains based on customer's requirement</li> </ul>
5.	Business Model (Revenue Model)	<b>1.Key Partners:</b> Users who use our app for booking tickets. Indian Railways. <b>2.Key Activities:</b> Our app is for booking train tickets faster and easier with QR Code. Our app provides live tracking of trains. Our app alerts passengers before destination station.

		<p><b>3.Customer Relationships:</b>  Customers can book tickets using online payment like Gpay/Paytm.  Customers can verify their ticket with the help of QR Code.</p> <p><b>4.Cost Structure:</b>  Actual ticket cost will be displayed on the user account for their journey.</p>
6.	Scalability of the Solution	<p>Proposed solution would have the above mentioned features in the initial version.  As we gain many users, the servers will be scaled in the cloud service to accommodate more users.  Some of them could be:</p> <ul style="list-style-type: none"> <li>● Improved process of generation and verification of QR</li> <li>● On demand toilet cleaning services inside trains</li> <li>● Automatic ticket checking at doors etc.,</li> </ul> <p>Our solution is viable as we can use a GPS module in all trains and connect them to a cloud service so that live location tracking is very easy.</p>