

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID51648
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)	Create an app web UI booking ticket to generate QR code verified by the ticket collector, parallelly we shall also sense some random location that altitude and longitude from the python code just to trace the live location of the train. By using the web UI and NODE RED to make reservation that is ticket booking so what over the ticket details it requests to enter all the details in the web UI. What the information user given, then based on the QR code it will be generated with id, this id is users unique id. So that the data will be saved in the cloudant DB database and at the last stage suppose the user want to verify the ticket then the collector wants to create a python code then scanning the QR code and whenever scanning the QR code it will be getting to know whether it is valid or not.
2.	Idea / Solution description	To finding the smart solutions for railways using internet of things (IOT) and cloud computing technologies. designing a web page for the public they can book the ticket and getting a QR code using that user can also track the train and knows about the booking details from python code and some sensors are used.
3.	Novelty / Uniqueness	Track the train using some sensors, by using the QR code the passenger gets the entire information about the passenger.
4.	Social Impact / Customer Satisfaction	Customer satisfaction is an important goal. To meet this goal, it is necessary to use an evaluation model for measuring the customer satisfaction level. Some important criteria such as dealing with passenger queries, helping passenger through track the train and

		<p>knowing about their passenger details etc. Are distinguished and used in the proposal model.</p>
5.	Business Model (Revenue Model)	<p>Smart solutions for railways are one of the essential in today's railway transportation. it will help the passenger to book their tickets from an app and track the live location of the train and known about their ticket or passengers details. it helps railways successfully manage the passenger safety, operational efficiency, passengers experience. Smart sensors can be used to track the important assets, manage passenger flow and enable predictive maintenance.</p>
6.	Scalability of the solution	<p>The public can book the tickets while the passenger gets the QR code and unique id using that the passenger can track the live location of train. it helps railways successfully manage the passenger safety, operational efficiency, passengers experience. Smart sensors can be used to track the important assets, manage passenger flow and enable predictive maintenance.</p>