Project Design Phase-I

Proposed Solution Template

Date	24 October 2022
Team ID	PNT2022TMID37828
Project Name	Project - Smart Solutions For Railways
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	How might we reduce the workload of the user and the use of paper while booking tickets? How to ease the work of verifying the Tickets which is usually done by TTE thereby reducing the paperwork?
2.	Novelty / Uniqueness	- User friendly interface (Web Page) to book the ticket. - Unique QR code for each user to verify their tickets. - GPS Module to track the location of Train andlive status is updated in the Web app
3.	Idea / Solution description	A Web UI is designed to enable online ticket booking anda QR code is generated for the user who has booked the ticket to verify it with Travelling Ticket Examiner (TTE) which is done using Cloud Service.
4.	Social Impact / Customer Satisfaction	❖ This model reduces the time consuming ticket booking by automating the process. ❖ TTE can easily verify the details of the passenger using the QR code generated while booking the ticket which may reduce the use of paper work.

		❖ The location of the train is updated periodically in the web app so customers can easily track the status of the train which may help the customer to arrive on time.
5.	Business Model (Revenue Model)	➔ This solution gives a feasibility to reduce the conventional ticket booking mechanism at counters which is tedious and time consuming, also the verification of the tickets is simplified. Since it also gives an additional train tracking method it will be more welcomed by the users. ➔ This model helps businessmen and travellers to book the tickets easily and it provides flexibility so customers will prefer this model which may increase the revenue of this model. ➔ Selling a Product which enables online booking platform and automatic verification system would fetch more revenues to the Organisation, also the Online Platform has to be maintained continuously and so, the business will sustain and can be improved if required.
6.	Scalability of the Solution	★ We propose a solution which works on the SaaS(Software as a Service) cloud model wherein all necessities are deployed in the web browser which gives an easy access and also the cost is minimal which gives a scaled solution approach. ★ The cloud is deployed as a public cloud model which gives a feasible access to upload passenger details and to retrieve data . ★ Further a QR code is generated to hold the unique data of user in cloud,and a GPS module is attached to Iot platform inorder to monitor the train location which gives an additional tracking mechanism to ensure reliability.