Project Design Phase-I
Proposed Solution Template

Date	
Team ID	PNT2022TMID37118
Project Name	Smart solution for railways

PROPOSED SOLUTION :

S NO	PARAMETER	DESCRIPTION
1.	Problem Statement (Problem to be solved)	• The explosively growing demand of internet of things (IoT) has rendered broadscale advancements in the fields across sensors, radio access, network, and hardware/software platforms for mass market applications.
2.	Idea / Solution description	• GPS facility is used for validation of the ticket at the source and deletion at the destination. • Smart sensors and analytics across the train engine,coaches,and tracks allow rail systems to be remotely checked and repaired before a small issue magnifies into huge trouble. • The operating cost involved in loading,transporting and unloading material from mining and other industries continue to rise as road travel is often prone to delays,especially for hauling heavy material. • Railway transport can be cost effective.rail has lower fuel costs compare to road transport.
3.	Novelty / Uniqueness	• The main uniqueness is ticket should be check using scanning ,this should be advance technology use in the system

4.	Social Impact / Customer Satisfaction	• Polish startup REDS develop software solutions to support railway operators to increase their safety,punctality,and energy efficiency. • Railways encouraged people to travel further and this meant people could move to different area to find work • The railways made india mobile and opened up new vistas and opportunities for its people.
5.	Business Model (Revenue Model)	• Smart sensors can be used to track important assets,manage passenger flow,and enable predictive maintenance.
6.	Scalability of the Solution	• The IoT technology has been heavily used in railway applications, including railway operations, management, maintenance, video surveillance systems, and train control systems