Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID32983
Project Name	Smart Solution for Railways
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
•	Problem Statement (Problem to be solved)	Train accidents are one of the issues in India , Even it was happening because of carless ness of the people some time it was happening due to the no men level crossing and also sometimes it is because of the careless ness of the train activators . Sometimes many animals dies because of this ,so we are trying to find solution for this issue and to save some lives. In other cases if some one was hit by the train but has a chance to live if he was taken to the hospital at the correct time our idea was one of the best example ton save lives in this process. And also it is applicable for the people who are traveling in the train foot steps.
•	Idea / Solution description	An assembled Arduino microcontroller is used as the core controller of the system. Once the code is uploaded to the microcontroller, no PC system, keyboard command, monitor is required to operate the system. The system functions automatically and independently according to the code uploaded to the microcontroller. We use ultra sonic sensors to detect the object by passing radiation on the rail track .after this if their any object on the rail track the sensor will detects and send message to the nearby station and also to the rail engine controller, unfortunately if the train hits the person the message will be sent to the nearby stations and also to the hospitality emergency .after the object detection the signal passed will be converted to the message in text form this is our idea for the smart solutions for railway

•	Novelty / Uniqueness	• to reduce the accidents and also to save lives if the people. • To this process we can also save some animals by this which are precious in the living world.
•	Social Impact / Customer Satisfaction	The main objective is to save life of the peoples and also to save animals. Over 3499 animals were died due to train accidents during the year 2019,it was increasing by every year. This will save more animals and human beings from death.
•	Business Model (Revenue Model)	We can share this idea to industries to get us to fix it in the train. We can give this this as a free train for initial stage and can charge money for the train basis as a contract.
•	Scalability of the Solution	Scalability of this device is very high and they can manage with less man power. The process of this may take time but the output and efficiency of this device is comparitively high