

## Project Design Phase-I Proposed Solution Template

Date	10 October 2022
Team ID	PNT2022TMID14761
Project Name	Emerging methods for early detection of forest fires
Maximum Marks	2 Marks

### Proposed Solution Template:

The project team shall fill in the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Emerging methods for early detection of forest fires
2.	Idea / Solution description	Based on the temperature, Humidity, and Oxygen data collected through a video feed, we designed Training and testing of data sets divided in an 80:20 ratio
3.	Novelty / Uniqueness	Accurate, affordable, robust, and reliable, No need of setting up a dedicated infrastructure. This application is meant for detecting fires using visual input and hence can be integrated with the existing surveillance infrastructure.
4.	Social Impact / Customer Satisfaction	Wildfires cause health problems and loss of life, devastating communities. They can create long-term air pollution as well, also impacting the health of a community. There is also a profound economic impact from wildfires, as properties and businesses are destroyed, and tourism and recreation are decimated.
5.	Business Model (Revenue Model)	Idea and opportunity, structure and strategic planning, commercial plan, financial plan.
6.	Scalability of the Solution	A widely used measure of fire intensity is fireline intensity, which is the rate of heat transfer per unit length of the fire line (measured in kW m <sup>-1</sup> ) and represents the radiant energy release in the flaming front.