Project Design Phase-I
Proposed Solution

Date	25 September 2022
Team ID	PNT2022TMID12754
Project Name	Emerging methods for early detection of forest fires
Team Leader	Bharathraj M
Team Mates	Bhanu Sagar K V,Suraj Kumar G,Vishwa M
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)**	**AI-based** methods for early detection of forest fires
2.	**Idea / Solution description**	A solution is needed in the early stages of **wildfires that detects smoke, hydrogen, and other gases emitted from pyrolysis to detect fires early, giving** firefighters valuable time to **put out** the fire before it **goes** out of control.
3.	**Novelty / Uniqueness**	Remote **Sensing** Machine **Learning** Wildfire **Prediction AI** Data **Mining**
4.	**Social Impact / Customer Satisfaction**	The most important factors in fighting wildfires are fire detection as quickly as possible, Accurate fire classification, and prompt response from the fire department. Several different types of wildfires are known, including ground fires, ground fires, and crown/tree fires. Each of these types of wildfires is specific, and appropriate countermeasures must be considered and applied to successfully extinguish them. Over the years, forest fire detection has been done in a variety of ways, from the use of forest poles to fully automated solutions.
5.	**Business Model (Revenue Model)**	**Annual** losses from **wildfires cross** India **were** moderately estimated at Rs 440 **crores.**

6.	**Scalability of the Solution**	Aviation systems have recently received a lot of attention due to the rapid development of UAV technology. These systems provide a wider and more accurate awareness of fires, even in areas that are difficult to access or considered too dangerous for the fire brigade. UAVs are also flexible in that they can cover larger areas and monitor other areas as needed.