Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID49509
Project Name	Emerging methods for early detection of forest fire
Maximum Marks	2 Marks

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	➢ I am a forest officer I'm trying to find forest fire but it's an difficult task to find it at the earliest because forest is a vast area, it is unable to put off the fire easily which makes me feel frustrated. ➢ I am an Tribal and my community is trying to find food and shelter because of fire, it will destruct everything which makes me feel unhappy.
2.	Idea / Solution description	➢ Abandoned areas can be monitored using drones. ➢ Cameras can be installed to capture the thermal images of fire. ➢ Heat detectors and smoke sensors can also be used to detect fire. ➢ GPS can be used to track the location of fire. ➢ Above these parameters are given as an data for convolutional neural network which can predict the forest fire. ➢ Fire alarm is used to notify the fire.

3.	Novelty / Uniqueness	The use of convolutional neural network can be able to process the image and also test the dataset also. So it is easy to predict the forest fire at the earliest and the location of fire is identified using GPS.
4.	Social Impact / Customer Satisfaction	➢ Can reduce the extinction of valuable animal species. ➢ Increased oxygen in air. ➢ Evacuations can be done before the fire got worse. ➢ Humans can use forest for their basic needs. ➢ Most essential trees can be saved. ➢ Tribals can live peacefully.
5.	Business Model (Revenue Model)	➢ We can make the forest as an tourist spot and can make revenue. ➢ We can collect various nuts and fruits from the forest and we can sell it. ➢ We can make many wooden products from the forest and sell it.
6.	Scalability of the Solution	The trained model is capable of adapting according to the datasets and the environmental situations.