Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID30303
Project Name	Project – Emerging Methods for Early Detection of Forest Fires
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)	**Forest fires** are a major threat to the environment and to the animals, plants and humans who inhabit them. The current monitoring systems for forests are not equipped with the best for **detecting** forest fires or **predict them in advance**. Due to this outdated model, there is a delayed response and this delay leads to **loss of lives and resources**.
2.	Idea / Solution description	Our solution uses **Artificial Intelligence** to analyse **video and image data** of forests to predict and detect forest fires. It also sends alerts to the respective fields for quick evacuation and response to control the fire in advance.
3.	Novelty / Uniqueness	We use **convolutional neural networks** which consist of input layer, hidden layers and output layer of interconnected neurons. Depending on the number of hidden layers we have machine learning methods and deep learning methods.
4.	Social Impact / Customer Satisfaction	The application can **provide critical information** about the forests and save lives and valuable resources easily when implemented. The **people being supported by the forests and the people who support the forests**, both are highly benefitted by this solution.
5.	Business Model (Revenue Model)	We can help governments create contract with our application to use our tools to protect the forests. We can **provide our service, help them maintain the tools and troubleshoot any issues** that they face.
6.	Scalability of the Solution	The range of the forests can be increased by **including sensors** for humidity, temperature and other sensors to increase the amount of critical data at hand without compromising the true – false ratio of the results generated by the Artificial Intelligence Model.