Project Design Phase-I
Proposed Solution Template

Date	1 October 2022
Team ID	PNT2022TMID00473
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)	To build a Deep Learning Model which can detect the forest fires. The objective for such a model is that it can be used to prevent lives in Forest. It gives accurate results. The model is being trained with training datasets in order to detect forest fires. Forest Fire Detection is based on Image Processing, Deep Learning has been proposed for the prediction in a timely manner. The proposed project is helpful to identify the fire signals and inform the respective person as an alert to take an appropriate action to prevent the forest fires.
2.	Idea / Solution description	To accomplish this ,the first step is to collect the dataset or create the dataset. The second step is image preprocessing in which the imagedatagenerator library is being imported and it's functionality is being applied to Trainset and Testset. The third step is Model Building in which the model building Libraries are being imported. Add CNN layers ,Hidden Layer and Output Layer . Then Configure the Learning Process . After training and testing the model optimize and save the model. The fourth step is Video Streaming and Alerting . Use OpenCV for processing the video . Create an account in Twilio service and use Twilio API to send messages .
3.	Novelty / Uniqueness	▪ Deep Learning Based Fire Detection. ▪ Image processing
4.	Social Impact / Customer Satisfaction	Customer (People Near Forest, Government) need not required to detect it manually. Early Detection is Better than Damage.

5.	Business Model (Revenue Model)	Predictive Model.
6.	Scalability of the Solution	It performs the detection in an accurate manner. It works efficiently.