Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID38957
Project Name	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)	**Statement**: To find emerging methods for early detection of forest fires using artificial intelligence. **Description**: This technology is to be implemented to locate a forest or a bush fire based on the concept of deep learning and YOLO algorithm. After detecting, authorities are to be alerted immediately to mitigate any damage.
2.	Idea / Solution description	• In case of forest fire detection, the burning substances are primarily identified as sceptical flame regions using a division strategy to expel thenon-fire structures and results are verified by deep learning model. • The technology used to locate a forest or a bush fire is based on the concept deep learning and YOLO algorithm.
3.	Novelty / Uniqueness	• Accurate and reliable recognition of sceptical flame regions by means of using YOLO v3 algorithm. • Unlike previous algorithms, the exact location of the origin of the forest fire is also detected and sent to the application.
4.	Social Impact / Customer Satisfaction	• Since we are detecting the outbreak of the fire before it is too big, loses of life, destruction of various environmental, geographical resources can be avoided. • Can stop the emission of CO_2 into the atmosphere and other toxic gases.
5.	Business Model (Revenue Model)	• The software platform to provide the fully autonomous processing of datareceived from the camera of UAV to obtain live feed in application.

			• This can also be deployed as a mobileapplication for easy accessibility.
6.	Scalability of the Solution		• This application can be developed as a world-wide surveillance system to monitor different forests. • Filtration of false positive result by comparing the dataset with the video feed obtained.