Project Design Phase-I

Date	19 September 2022
Team ID	PNT2022TMID40613
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)	Emerging methods for early detection of forests fires
2.	Idea / Solution description	Forest surveillance video cameras can be used to monitor the forest areas and they can alert the forest department if there is any symptoms of forest fire or any other suspicious activities.
3.	Novelty / Uniqueness	The digital image processing technique, pattern-recognition technology and reinforcement learning can greatly improve the sensing of forest fire and they are much more effective as they improve forecast and reaction time is much less
4.	Social Impact / Customer Satisfaction	This product has huge social and biological impact as prevention of forest fire can save countless acres of forest land and wild lives. Forest fire also increases the amount of CO2 in the atmosphere. So prevention of forest fire can also reduce global warming.
5.	Business Model (Revenue Model)	This product can be only used by a giant corporation or a government to monitor huge reserve forests. This can be considered as a profitable and useful product as government spends millions of dollars for detection of forest fires and millions more if there is any actual forest fire like rescuing and stopping the fire.
6.	Scalability of the Solution	It is highly challenging to implement this method as we have to install hundreds of cameras to cover a respectable amount of area. The cameras need to be connected to electricity and they also need to be connected to internet to process the image and analyze them. They need to be connected to local server which should be located at the middle of the forest.