

**Project Design Phase-I**  
**Proposed Solution Template**

|               |   |
|---------------|---|
| Date          | 03 October 2022   |
| Team ID       | PNT2022TMID26119  |
| 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) | There is an immense resource available in the forest.<br>Due to the forest fires we lose those immense resources .<br>So it is necessary to detect forest fire before happening.<br>But it is difficult to detect forest fire due to its larger area.   |
| 2.    | Idea / Solution description              | In order to solve the above problem we can make use of artificial intelligence and video surveillance systems to detect and alarm before the fire is emerging.  |
| 3.    | Novelty / Uniqueness                     | Due to the complex background and large Wildfire room image, sure wildfires pose difficulties in the identification process.<br>Applying convolutional neural network (CNN) technology to image recognition can reduce visual impairment and randomness to a large extent in the feature extraction process and theoretically extract deeper features that could greatly improve the accuracy of flame image recognition. |
| 4.    | Social Impact / Customer Satisfaction    | Fire detection system prevent huge loss of flora and fauna and people who reside in the forest.<br>The emission of green house gas is reduced.  |
| 5.    | Business Model (Revenue Model)           | Subscription fees and advertising will be the income source for this model .<br>We can also provide the entire system with the hardware by keeping a margin and making income out of it too.  |
| 6.    | Scalability of the Solution              | This model improves its accuracy by self learning while it performs with real life data.<br>Which in turn works with high accuracy ,<br>reducing green house gas emissions and saving the lives of flora and fauna.   |