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| <b>Date</b>         | 08 November 2022  |
| <b>Team Id</b>      | PNT2022TMID26356  |
| <b>Project Name</b> | Natural Disasters Intensity Analysis and Classification using Artificial Intelligence |
| <b>Marks</b>        | 2 Marks   |

### **PROJECT OBJECTIVES**

- Integrating frontier technologies including Artificial Intelligence (AI) into existing emergency systems can harness the potential of existing data streams and improve hazard mitigation and disaster management.
- When using AI to detect extreme events such as avalanches or earthquakes, the availability of data can be a limiting factor.
- AI-based methods can be very effective if a training dataset covers very large events. However, the availability of such data is limited because of the rarity of these events.
- This can be achieved by using the Deep Learning and CNN model with the cumulative effect of the Artificial Intelligence technology.
- The objectives of this project can be summarized as follows:
  - We will be able to learn how to get and prepare the dataset.
  - We will be able to know how to do image

processing.

- We will understand how CNN layers are work.
- Classify images using a Convolutional Neural Network.
- We will be able to know what are the activation functions can be used.
- We will be able to know how to read images using Open CV.
- We will know convolutional Neural Networks for Computervision AI Problems.

- Upon completing all the above mentioned tasks or milestones we can obtain a model which can predict the forest fires at an early stage.