Team ID	PNT2022TMID16559
Project Name	<b>Emerging Methods for Early Detection of Forest Fires</b>
Team members	SHARMILA P MADHUMITHA V MIRUDHULA N ISWARYA S

## MILESTONE LIST

Milestone Name	Milestone Number	Description	Mandatory	
Project Objects	M	We will be able to learn to prepare dataset, image processing, working with CNN layers, read images using OpenCV and CNN for computer vision AI	Yes	1
Project Flow	M-02	A project management process flowchart is a graphical aid, designed to visualize the sequence of steps to be followed throughout the project management process	Yes	
Pre-Requisites	M-03	To complete this project, we should have known following project such as Keras, Tensor Flow, Python ,Anaconda, OpenCV, Flask, Scikit-learn etc	Yes	

Prior Knowledge	M-04	One should have knowledge on the Supervised Learning ,CNN and Regression Classification and Clustering, ANN	Yes	
Data collection	M-05	We can collect dataset from different open sources like kaggle.com, UCI machine learning etc.	Yes	
Image Pre-processing	M-06	Importing the ImageDataGenerator libraries, Define Parameters/Arguments for ImageDataGenerator class, Applying Image Data Generator Functionality to trainset and test set	Yes	
Model Building	M-07	Importing the model building libraries, Initializing the model, Adding CNN layers, Adding Dense layers, Configuring the learning Process, Train the model, Save the model, Predictions.	Yes	
Video Analysis	M-08	Opency for video processing, creating an account in twilio service and sending alert message	Yes	
Train CNN model	M-09	Register for IBM Cloud and train Image Classification Model	Yes	
Ideation Phase	M-10	Prepare Literature Survey on the selected Project and Information Gathering, empathy map and ideation	Yes	
Project Design Phase-I	M-11	Prepare Proposed solution , problem-solution fit and Solution Architecture	Yes	
Project Design Phase-II	M-12	Prepare Customer journey ,functional requirements, Dataflow diagram and Technology Architecture	Yes	
Project Planning Phase	M-13	Prepare Milestone list, Activity list and Sprint Delivery Plan	Yes	

Project Development	M-14	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4	Yes	
Phase				

## **ACTIVITY LIST**

Activity Number	Activity	Sub Activity	Assigned To	Status
1.	PROJECT OBJECTIVES		All Members	Completed

2.	PROJECT FLOW		All Members	Completed
3.	PRE-REQUISITES		All Members	Completed
4.	PRIOR KNOWLEDGE		All Members	Complete
5.	DATA COLLECTION	5.1 Download the Dataset 5.2 Technology Architecture	All Members	Completed
6.	IMAGE PREPROCESSING	6.1 Import the ImageDataGenerator Library. 6.2 Define the Parameters/Argument s for ImageDataGenerator class. 6.3 Applying ImageDataGenerator Functionality to trainset and test set.	All Members	Completed

learning process. 7.6 Training the model.	Completed	All Members	7.1 Importing the model building libraries. 7.2 Initializing the model. 7.3 Adding CNN layers. 7.4 Adding dense layers. 7.5 Configuring the	MODEL BUILDING	7.
model. 7.8 Predictions.			<ul><li>7.6 Training the model.</li><li>7.7 Saving the model.</li></ul>		

8.	VIDEO ANALYSIS	8.1 OpenCV for video processing. 8.2 Creating an account in Twilio service. 8.3 Sending alert message.	All Members	Completed
9.	TRAIN CNN MODEL ON IBM	<ul><li>9.1 Train image</li><li>classification model.</li><li>9.2 Register for IBM</li><li>cloud.</li></ul>	All Members	Completed
10.	IDEATION PHASE	10.1 Literature Review. 10.2 Empathy map. 10.3 Ideation.	All Members	Completed

11.	PROJECT DESIGN PHASE – I	11.1 Proposed Solution. 11.2 Problem solution fit. 11.3 Solution Architecture.	All Members	Completed
12.	PROJECT DESIGN PHASE -II	12.1 Customer journey. 12.2 Functional requirement. 12.3 Data flow Diagrams. 11.4 Technology Architecture.	All Members	Completed
13.	PROJECT PLANNING PHASE	13.1 Prepare milestone and activity list. 13.2 Sprint delivery plan.	All Members	Completed
14.	PROJECT DEVELOPMENT PHASE	14.1 Project development-Delivery of Sprint-1. 14.2 Project development-Delivery of Sprint-2. 14.3 Project development-Delivery of Sprint-3. 14.4 Project development-Delivery of Sprint-4.	All Members	In Progress