Team ID	PNT2022TMID43779
Project Name	<b>Emerging Methods for Early Detection of Forest Fires</b>
Team members	Gowtham K
	Josenelson S
	Ramacharan M
	Samraj R

## **MILESTONE LIST**

Milestone Name	Mileston	Description	Mandatory	
	e Number			
Project Objectives	M-01	We will be able to learn to prepare dataset, image processing, working with CNN layers, read images using OpenCV and CNNfor computervision AI	Yes	-
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, TensorFlow, 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 Preprocessing	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 Phase	M-14	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4	Yes	

## **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.	DATA COLLECTION	4.1 Download the Dataset	NAKUL ANAND C	Completed
5.	IMAGE PREPROCESSING	5.1 Import the ImageDataGenerator Library. 5.2 Define the Parameters/Arguments for ImageDataGenerator class. 5.3 Applying ImageDataGenerator Functionality to trainset and testset.	All Members	In Progress
6.	MODEL BUILDING	<ul><li>6.1 Importing the model building libraries.</li><li>6.2 Initializing the model.</li><li>6.3 Adding CNN layers.</li><li>6.4 Adding dense layers.</li><li>6.5 Configuring the</li></ul>	All Members	In Progress

		learning process. 6.6 Training the model. 6.7 Saving the model. 6.8 Predictions.		
7.	VIDEO ANALYSIS	<ul><li>7.1 OpenCV for video processing.</li><li>7.2 Creating an account in Twilio service.</li><li>7.3 Sending alert message.</li></ul>	NAKUL ANAND C	In Progress
8.	TRAIN CNN MODEL ON IBM	8.1 Train image classification model. 8.2 Register for IBM cloud.	NAKUL ANAND C	In Progress
9.	IDEATION PHASE	<ul><li>9.1 Literature Review.</li><li>9.2 Empathy map.</li><li>9.3 Ideation.</li></ul>	All Members	Completed
10.	PROJECT DESIGN PHASE – I	<ul><li>10.1 Proposed Solution.</li><li>10.2 Problem solution fit.</li><li>10.3 Solution</li><li>Architecture.</li></ul>	All Members	Completed
11.	PROJECT DESIGN PHASE -II	<ul><li>11.1 Customerjourney.</li><li>11.2 Functional requirement.</li><li>11.3 Data flow Diagrams.</li><li>11.4 Technology Architecture.</li></ul>	All Members	Completed
12.	PROJECT PLANNING PHASE	12.1 Prepare milestone and activity list. 12.2 Sprint delivery plan.	All Members	Completed

PROJECT DEVELOPMENT PHASE	13.1 Project development-Delivery of Sprint-1. 13.2 Project development-Delivery of Sprint-2. 13.3 Project development-Delivery of Sprint-3. 13.4 Project development-Delivery of Sprint-4.	All Members	In Progress
---------------------------	---	-------------	-------------