

### **MILESTONE LIST**

<b>Team ID</b>	<b>PNT2022TMID51523</b>
<b>Project Name</b>	<b>Emerging Methods for Early Detection of Forest Fires</b>
<b>Team members</b>	<b>1.Jose Vasanth A 2.Jijo K V 3.Maria Vifil Joy S 4.Linson J</b>

<b>Milestone Name</b>	<b>Milestone Number</b>	<b>Description</b>	<b>Mandatory</b>
<b>Project Objectives</b>	M-01	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
<b>Project Flow</b>	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
<b>Pre-Requisites</b>	M-03	To complete this project, we should have known following project such as Keras, TensorFlow, Python, Anaconda, OpenCV, Flask, Scikit-learn etc....	Yes

<b>Prior Knowledge</b>	M-04	One should have knowledge on the Supervised Learning, CNN and Regression Classification and Clustering, ANN	Yes
<b>Data collection</b>	M-05	We can collect dataset from different open sources like kaggle.com, UCI machine learning etc.	Yes
<b>Image Pre processing</b>	M-06	Importing the Image Data Generator libraries, Define Parameters/Arguments for Image Data Generator class, Applying Image Data Generator Functionality to trainset and test set	Yes
<b>Model Building</b>	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
<b>Video Analysis</b>	M-08	Open CV for video processing, creating an account in twilio service and sending alert message	Yes
<b>Train CNN model</b>	M-09	Register for IBM Cloud and train Image Classification Model	Yes
<b>Ideation Phase</b>	M-10	Prepare Literature Survey on the selected Project and Information Gathering, empathy map and ideation	Yes
<b>Project Design</b>	M-11	Prepare Proposed solution, problem-solution fit and Solution Architecture	Yes

<b>Phase-I</b>			
<b>Project Design Phase-II</b>	M-12	Prepare Customer journey, functional requirements, Dataflow diagram and Technology Architecture	Yes
<b>Project Planning Phase</b>	M-13	Prepare Milestone list, Activity list and Sprint Delivery Plan	Yes
<b>Project Development Phase</b>	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	All Members	Completed
5.	IMAGE PREPROCESSING	5.1 Import the Image Data Generator Library. 5.2 Define the Parameters/Arguments for Image Data Generator class. 5.3 Applying Image Data Generator	All Members	In Progress

		Functionality to trainset and test set.		
6.	MODEL BUILDING	6.1 Importing the model building libraries. 6.2 Initializing the model. 6.3 Adding CNN layers. 6.4 Adding dense layers. 6.5 Configuring the learning process. 6.6 Training the model. 6.7 Saving the model. 6.8 Predictions	All Members	In Progress

7.	VIDEO ANALYSIS	7.1 OpenCV for video processing. 7.2 Creating an account in Twilio service. 7.3 Sending alert message.	All Members	In Progress
8.	TRAIN CNN MODEL ON IBM	8.1 Train image classification model. 8.2 Register for IBM cloud.	All Members	In Progress
9.	IDEATION PHASE	9.1 Literature Review. 9.2 Empathy map. 9.3 Ideation.	All Members	Completed
10.	PROJECT DESIGN PHASE – I	10.1 Proposed Solution. 10.2 Problem solution fit. 10.3	All Members	Completed

		Solution Architecture.		
11.	PROJECT DESIGN PHASE -II	11.1 Customer journey. 11.2 Functional requirement. 11.3 Data flow Diagrams. 11.4 Technology Architecture.	All Members	Completed
12.	PROJECT PLANNING PHASE	12.1 Prepare milestone and activity list. 12.2 Sprint delivery plan.	All Members	Completed

13.	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
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