

## MILESTONE LIST

Project Name	Emerging Methods For Early Detection Of Forest Fires	Date	21/10/2022
Project Domain	Artificial Intelligence	No of Members	4
Project Leader	Sriram.P	Project Owner/Client	IBM

Milestone Name	Milestone Number	Description
Project Objectives	M-001	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
Project Flow	M-002	A project management process flowchart is a graphical aid, designed to visualize the sequence of steps to be followed throughout the project management process
Pre-Requisites	M-003	To complete this project we should have known following project such as Keras, Tensorflow, Python ,Anaconda, OpenCV, Flask, Scikit-learn etc...
Prior Knowledge	M-004	One should have knowledge on the Supervised Learning ,CNN and Regression Classification and Clustering, ANN
Data collection	M-005	We can collect dataset from different open sources like kaggle.com, UCI machine learning etc
Image Preprocessing	M-006	Importing the ImageDataGenerator libraries, Define Parameters/Arguments for ImageDataGenerator class, Applying Image Data Generator Functionality to trainset and testset
Model Building	M-007	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.
Video Analysis	M-008	Opencv for video processing, creating an account in twilio service and sending alert message
Train CNN model	M-009	Register for IBM Cloud and train Image Classification Model
Ideation Phase	M-010	Prepare Literature Survey on the selected Project and Information Gathering, empathy map and ideation
Project Design Phase-I	M-011	Prepare Proposed solution , problem-solution fit and Solution Architecture
Project Design Phase-II	M-012	Prepare Customer journey ,functional requirements,Data flow diagram and Technology Architecture
Project Planning Phase	M-013	Prepare Milestone list , Activity list and Sprint Delivery Plan
Project DevelopmentPhase	M-014	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4

## ACTIVITY LIST

Project Name	Emerging Methods for Early Detection of Forest Fires	Date	21/10/2022
Project Number	41443-1660642202	No of Members	4
Project Leader	Sriram.P	Project Owner/Client	IBM

Activity Number	Activity Name	Detailed Activity Description	Assigned To
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1.1	Access Resources	Access the resources (courses) in project dashboard.	All Members
1.2	Rocket chat registration	Join the mentoring channel via platform & rocket-chat mobile app.	All Members
1.3	Access workspace	Access the guided project workspace.	All Members
1.4	IBM Cloud registration	Register on IBM Academic Initiative & Apply Feature code for IBM Cloud Credits.	All Members
1.5	Project Repository Creation	Create GitHub account & collaborate with Project Repository in project workspace.	All Members
1.6	Environment Setup	Set-up the Laptop / Computers based on the pre-requisites for each technology track.	All Members
2.1	Literature survey	Literature survey on the selected project & Information Gathering.	Pavithra M Yukth Sree RS
2.2	Technology Training	Attend the technology trainings as per the training Calendar.	All Members
2.3	Empathy Map	Prepare Empathy Map Canvas to capture the user Pains & Gains, Prepare list of problem statements	Ramya N Rakshitha J
2.4	Technology Training	Attend the technology trainings as per the training Calendar.	All Members
2.5	Brainstorming	List the ideas (at least 4 per each team member) by	All Members

		organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance.	
2.6	Technology Training	Attend the technology trainings as per the training Calendar.	All Members
3.1	Proposed Solution Document	Prepare the proposed solution document, which includes the novelty, feasibility of idea, business model, social impact, scalability of solution, etc.	Ramya N Rakshitha J
3.2	Technology Training	Attend the technology trainings as per the training Calendar.	All Members
3.3	Problem - Solution fit & Solution Architecture	Prepare problem - solution fit document & Solution Architecture.	Pavithra M Yukth Sree RS
3.4	Technology Training	Attend the technology trainings as per the training Calendar.	All Members

4.1	Customer Journey Map	Prepare the customer journey maps to understand the user interactions & experiences with the application (entry to exit).	All Members
4.2	Technology Training	Attend the technology trainings as per the training Calendar.	All Members
4.3	Functional Requirements & Data Flow Diagrams	Prepare the Functional Requirement Document & Data- Flow Diagrams.	Pavithra M Yukthha Sree RS Ramya N
4.4	Technology Architecture	Prepare Technology Architecture of the solution.	Ramya N
4.5	Technology Training	Attend the technology trainings as per the training Calendar.	All Members
5.1	Milestone & Activity List	Prepare Milestone & Activity List.	Pavithra M Yukthha Sree RS
5.2	Sprint Delivery Plan	Prepare Sprint Delivery Plan.	Ramya N Yukthha Sree RS
6	Data Collection	Collect datasets from different open sources like kaggle.com, data.gov, UCI machine learning repository, etc.	Ramya N Pavithra M
7.1	Image Preprocessing	Importing the ImageDataGenerator Library	Pavithra M Yukthha Sree RS
7.2	Image Preprocessing	Define the parameters/arguments for ImageDataGenerator class.	Ramya N Rakshitha J
7.3	Image Preprocessing	Applying ImageDataGenerator functionality to trainset and test set.	Ramya N Yukthha Sree RS
8.1	Model Building	Importing the model building libraries.	Pavithra M Yukthha Sree RS
8.2	Model Building	Initializing the model.	Ramya N Rakshitha J
8.3	Model Building	Adding CNN Layers.	Pavithra M Yukthha Sree RS
8.4	Model Building	Adding Dense Layers	Ramya N Rakshitha J
8.5	Model Building	Configuring the learning process	Pavithra M Yukthha Sree RS
8.6	Model Building	Training the Model	Ramya N Yukthha Sree RS
8.7	Model Building	Save the model	Rakshitha J Yukthha Sree RS
8.8	Model Building	Predictions	Rakshitha J Yukthha Sree RS
9.1	Video Analysis	OpenCV for video processing.	Ramya N Rakshitha J
9.2	Video Analysis	Creating an account in Twilio service.	Ramya N Rakshitha J
9.3	Video Analysis	Sending alert message.	Pavithra M Yukthha Sree RS
10.1	Train CNN Model on IBM	Register for IBM Cloud	All Members

10.2	Train CNN Model on IBM	Train Image Classification Model	All Members
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