Milestone

Project Name	Emerging Methods for Early Detection of Forest Fires	Date	22/10/2022
Project Domain	Artificial Intelligence	No of Members	4
Project Leader	G. Vishwanadhani	Project owner/Client	IBM

Milestone Name	Milestone Number	Description	Mandatory	Optional
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	Yes	-
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	Yes	
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.…	Yes	
\ Prior Knowledge	M-004	One should have knowledge on the Supervised Learning ,CNN and Regression Classification and Clustering, ANN	Yes	
Data collection	M-005	We can collect dataset from different open sources like kaggle.com, UCI machine learning etc	Yes	
Image Preprocessing	M-006	Importing the ImageDataGenerator libraries, Define Parameters/Arguments for ImageDataGenerator class, Applying Image Data Generator Functionality to trainset and test set	Yes	
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.	Yes	
Video Analysis	M-008	OpenCV for video processing, creating an account in Twilio service and sending alert message	Yes	
Train CNN model	M-009	Register for IBM Cloud and train Image Classification Model	Yes	
Ideation Phase	M-010	Prepare Literature Survey on the selected Project and Information Gathering, empathy map and ideation	Yes	
Project Design Phase-I	M-011	Prepare Proposed solution, problem-solution fit and Solution Architecture	Yes	
Project Design Phase-II	M-012	Prepare Customer journey, functional requirements, Data flow diagram and Technology Architecture	Yes	
Project Planning Phase	M-013	Prepare Milestone list, Activity list and Sprint Delivery Plan	Yes	
Project Development Phase	M-014	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4	Yes	

ACTIVITY LIST

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Activity Number	Activity Name	Detailed Activity Description	Assigned To	Status /Comments
1.1	Access Resources	Access the resources (courses) in project dashboard.	All Members	COMPLETED
1.2	Rocket chat registration	Join the mentoring channel via platform & rocket-chat mobile app.	All Members	COMPLETED
1.3	Access workspace	Access the guided project workspace.	All Members	COMPLETED
1.4	IBM Cloud registration	Register on IBM Academic Initiative & Apply Feature code for IBM Cloud Credits.	2 All Members	COMPLETED
1.5	Project Repository Creation	Create GitHub account & collaborate with Project Repository in project workspace.	All Members	COMPLETED
1.6	Environment Setup	Set-up the Laptop / Computers based on the pre-requisites for each technology track.	All Members	COMPLETED
2.1	Literature survey	Literature survey on the selected project & Information Gathering.	All Members	COMPLETED
2.2	Technology Training	Attend the technology trainings as per the training Calendar.	All Members	COMPLETED
2.3	Empathy Map	Prepare Empathy Map Canvas to capture the user Pains & Gains, Prepare list of problem statements	All Members	COMPLETED
2.4	Technology Training	Attend the technology trainings as per the training Calendar.	All Members	COMPLETED
2.5	Brainstorming	List the ideas (at least 4 per each team member) by organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance.	All Members	COMPLETED

2.6	Technology Training	Attend the technology trainings as per the training Calendar.	All Members	COMPLETED
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.	All Members	COMPLETED
3.2	Technology Training	Attend the technology trainings as per the training Calendar.	All Members	COMPLETED
3.3	Problem - Solution fit & Solution Architecture	Prepare problem - solution fit document & Solution Architecture.	All Members	COMPLETED
3.4	Technology Training	Attend the technology trainings as per the training Calendar.	All Members	COMPLETED
4.1	Customer Journey Map	Prepare the customer journey maps to understand the user interactions & experiences with the application (Entry to exit).	All Members	COMPLETED
4.2	Technology Training	Attend the technology trainings as per the training Calendar.	All Members	COMPLETED
4.3	Functional Requirements & Data Flow Diagrams	Prepare the Functional Requirement Document & Data-Flow Diagrams.	All Members	COMPLETED
4.4	Technology Architecture	Prepare Technology Architecture of the solution.	All Members	COMPLETED
4.5	Technology Training	Attend the technology trainings as per the training Calendar.	All Members	COMPLETED
5.1	Milestone & Activity List	Prepare Milestone & Activity List.	All Members	COMPLETED
5.2	Sprint Delivery Plan	Prepare Sprint Delivery Plan.	All Members	COMPLETED
6	Data Collection	Collect datasets from different open sources like kaggle.com, data.gov, UCI machine learning repository, etc.	All Members	IN PROCRESS
7.1	Image Preprocessing	Importing the ImageDataGenerator Library	All Members	IN PROGRESS
7.2	Image Preprocessing	Define the parameters/arguments for ImageDataGenerator class.	All Members	IN PROGRESS
7.3	Image Preprocessing	Applying ImageDataGenerator functionality to trainset and test set.	All Members	IN PROGRESS

8.1	Model Building	Importing the model building libraries.	All Members	IN PROGRESS
8.2	Model Building	Initializing the model.	All Members	IN PROGRESS
8.3	Model Building	Adding CNN Layers.	All Members	IN PROGRESS
8.4	Model Building	Adding Dense Layers	All Members	IN PROGRESS
8.5	Model Building	Configuring the learning process	All Members	IN PROGRESS
8.6	Model Building	Training the Model	All Members	IN PROGRESS
8.7	Model Building	Save the model	All Members	IN PROGRESS
8.8	Model Building	Predictions	All Members	IN PROGRESS
9.1	Video Analysis	OpenCV for video processing.	All Members	IN PROGRESS
9.2	Video Analysis	Creating an account in Twilio service.	All Members	IN PROGRESS
9.3	Video Analysis	Sending alert message.	All Members	IN PROGRESS
10.1	Train CNN Model on IBM	Register for IBM Cloud	All Members	IN PROGRESS
10.2	Train CNN Model on IBM	Train Image Classification Model	All Members	IN PROGRESS