

**Project Planning
Phase Milestone and Activity List**

Date	03-11-2022
TeamID	PNT2022TMID30386
ProjectName	Project-Early detection of forest fire using deeplearning

MILESTONE LIST:

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 ImageDataGenerator Functionality to train set 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 messages.	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	

ACTIVITYLIST:

Activity Number	ActivityName	DetailedActivityDescription	TaskAssigned	Status
1.1	AccessResources	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.	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 prerequisites 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 brainstorm session and prioritize the ideas	All Members	COMPLETED

2.6	TechnologyTraining	Attendthetechnologytrainingsasperthe trainingCalendar.	AllMembers	COMPLETED
3.1	Proposed SolutionDocumen t	Prepare the proposed solutiondocument,whichincludestheno velty,feasibility of idea, business model,social impact,scalabilityofsolution,etc.	AllMembers	COMPLETED
3.2	TechnologyTraining	Attendthetechnologytrainingsasperthe trainingCalendar.	AllMembers	COMPLETED
3.3	Problem- Solutionfit&SolutionAr chitecture	Prepare problem - solution fitdocument&SolutionArchitecture.	AllMembers	COMPLETED
3.4	TechnologyTraining	Attendthetechnologytrainingsasperthe trainingCalendar.	AllMembers	COMPLETED
4.1	CustomerJourneyMap	Prepare the customer journey maps tounderstand the user interactions &experienceswiththeapplication(entryt oexit).	AllMembers	COMPLETED
4.2	TechnologyTraining	Attendthetechnologytrainingsasperthe trainingCalendar.	AllMembers	COMPLETED
4.3	FunctionalRequirements& DataFlowDiagrams	Prepare the Functional RequirementDocument&DataFlowDiag rams.	AllMembers	COMPLETED
4.4	TechnologyArchitecture	Prepare Technology Architectureofthesolution.	AllMembers	COMPLETED
4.5	TechnologyTraining	Attendthetechnologytrainingsaspert hetrainingCalendar.	AllMembers	COMPLETED
5.1	Milestone&ActivityList	PrepareMilestone& ActivityList.	AllMembers	COMPLETED
5.2	SprintDeliveryPlan	PrepareSprintDeliveryPlan.	AllMembers	INPROGRESS

6	DataCollection	Collect datasets from different opensources like kaggle.com, data.gov,UClmachinelearningreposit ory,etc.	AllMembers	COMPLETED
7.1	ImagePreprocessing	Importing the ImageDataGeneratorLibrary	AllMembers	INPROGRESS
7.2	ImagePreprocessing	Define the parameters/arguments forImageDataGeneratorclass.	AllMembers	INPROGRESS
7.3	ImagePreprocessing	Applying ImageDataGeneratorfunctionalitytot rainsetandtestset.	AllMembers	INPROGRESS
8.1	ModelBuilding	Importing the model buildinglibraries.	AllMembers	INPROGRESS

8.2	ModelBuilding	Initializingthemodel.	AllMembers	INPROGRESS
8.3	ModelBuilding	AddingCNNLayers.	AllMembers	INPROGRESS
8.4	ModelBuilding	AddingDenseLayers	AllMembers	INPROGRESS
8.5	ModelBuilding	Configuringthelearningprocess	AllMembers	INPROGRESS
8.6	ModelBuilding	TrainingtheModel	AllMembers	INPROGRESS
8.7	ModelBuilding	Savethemodel	AllMembers	INPROGRESS
8.8	ModelBuilding	Predictions	AllMembers	INPROGRESS
9.1	VideoAnalysis	OpenCVforvideoprocessing.	AllMembers	INPROGRESS
9.2	VideoAnalysis	CreatinganaccountinTwilioservice.	AllMembers	INPROGRESS
9.3	VideoAnalysis	Sendingalertmessage.	AllMembers	INPROGRESS
10.1	TrainCNNModelonIBM	RegisterforIBMCloud	AllMembers	INPROGRESS
10.2	TrainCNNModelonIBM	TrainImageClassificationModel	AllMembers	INPROGRESS