# MILESTONE LIST

Project Name	Fertilizer Recommendation System For	Date	04/11/2022
	Disease Prediction		
Project Domain	Artificial Intelligence	No of Members	4
Project Leader	Priyadharshini S	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 Al	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 testset	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	Opency 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 DevelopmentPhase	M-014	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4	Yes	

# **ACTIVITY LIST**

Project Name	Fertilizer Recommendation System For Disease Prediction	Date	04/11/2022
Team ID	PNT2022TMID42096	No of Members	4
Project Leader	Priyadharshini S	Project Owner/Client	IBM

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.	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	All Members	COMPLETED

		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	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	IN PROGRESS

6	Data Collection	Collect datasets from different open sources like kaggle.com, data.gov, UCI machine learning repository, etc.	All Members	COMPLETED
7.1	Image Preprocessing	Importing the ImageDataGenerator Library	All Members	COMPLETED
7.2	Image Preprocessing	Define the parameters/arguments for ImageDataGenerator class.	All Members	COMPLETED
7.3	Image Preprocessing	Applying ImageDataGenerator functionality to trainset and test set.	All Members	COMPLETED
8.1	Model Building	Importing the model building libraries.	Priyadharshini S Thenmozhi R	IN PROGRESS
8.2	Model Building	Initializing the model.	Keerthika P Vinith R	IN PROGRESS
8.3	Model Building	Adding CNN Layers.	Priyadharshini S Thenmozhi R	IN PROGRESS
8.4	Model Building	Adding Dense Layers	Keerthika P Vinith R	IN PROGRESS
8.5	Model Building	Configuring the learning process	Priyadharshini S Thenmozhi R	IN PROGRESS
8.6	Model Building	Training the Model	Keerthika P Vinith R	IN PROGRESS
8.7	Model Building	Save the model	Priyadharshini S Thenmozhi R	IN PROGRESS
8.8	Model Building	Predictions	Keerthika P Vinith R	IN PROGRESS
9.1	Video Analysis	OpenCV for video processing.	Priyadharshini S Thenmozhi R	IN PROGRESS
9.2	Video Analysis	Creating an account in Twilio service.	Keerthika P Vinith R	IN PROGRESS
9.3	Video Analysis	Sending alert message.	Priyadharshini S Thenmozhi R	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

### Team id: PNT2022TMID42096

Project Milestone & Activity Planning:

### Milestone:

Modern Technology are increasing and optimizing the Performance of the Artificial Intelligences (AI) Model.

Based Crop Yield Disease Prediction System, is helpful for farmers to prevent the crop from the various Disease which can identify the Disease with in a process of capturing the Image at the plant and Machine Learning Algorithm will give affected Disease Name.

In this Project Milestone will be given the Best Solution for the farmer using the complete friendly and simple user interface web application to fetching the solution by own.

In addition, process we are planned to add a valid Module that is Fertilizer recommendation for the Specific Disease. It can give both Artificial fertilizer and Natural Fertilizer in

suggestion manner.



## Activity List:

In Project Management Planning is an Important task to scheduling the phrase of the project to the Team Member.

In this Activity can shows the various activity are allocated and Done by the Team Members!

In Project we can Split into the Four Step of Phrases are

Phrase 1: Information Collection and Requirement Analysis

Phrase 2: Project Planning and Developing Modules

Phrase 3: Implementing the High Accuracy Deep Learning Algorithm to Perform

Phrase 4: Deploying the Model on Cloud and Testing the Model and UI Performance

