

Project Planning Phase Milestone & Activity list

Date	08 November, 2022
Team ID	PNT2022TMID08044
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy

Milestone List

Milestone name	Milestone number	Description	Mandatory
Pre Requisite	M-01	To complete this project, we should have known the following software's, concepts and packages such as Anaconda navigator and pycharm/spyder and packages like numpy, pandas, flask etc	Yes
Prior Knowledge	M-02	One must have prior knowledge such as Deep Learning Concepts(CNN, VGG16, Resnet50, Inception V3, Xception) and Flask	Yes
Project Objectives	M-03	By end of the project one will know, fundamental concepts and techniques like Xception, gain understanding of image data, how to pre-process the data using different preprocessing techniques, how to build a web application using flask framework	Yes
Project Flow	M-04	Activities are Data Collection, Data pre-processing, Model Building, Cloudant DB, Application Building	Yes
Project Structure	M-05	To create this project folder, one should build flask application which includes HTML pages, CSS, Images and training files etc	Yes
Data Collection	M-06	This project needs heavy datasets. This milestone allows us to download the datasets.	Yes
Data Pre-processing	M-07	In this milestone, improving the image data that enhances the image features for preprocessing and geometric transformations like rotation, scaling and translation etc	Yes
Model Building	M-08	To build a model, pre-trained model which is Xception, CNN architecture model for Image Classification	Yes
Create Cloudant DB	M-09	To create a Cloudant DB, this contains few steps are Register & login to IBM Cloud, Create Service Instance, Create Service Credentials, Launch Cloudant DB, Create Database	Yes

Application Building	M-10	Should build Web Application,UI used for images uploading and this milestone contains the steps like Building Html Pages and Python Code,Run the Application	Yes
Train the Model on IBM	M-11	Here we are using IBM cloud , this milestone contains steps like Register for IBM Cloud and Train Model on IBM	
Ideation Phase	M-12	This milestone contains Literature Survey on the Selected Project & Information Gathering,Preparing Empathy Map,Ideation	
Project design phase-I	M-13	Prepare Proposed solution, problem-solution fit and Solution Architecture	Yes
Project Design Phase-II	M-14	Prepare Customer journey ,Functional requirements, Dataflow diagram and Technology Architecture	Yes
Project Planning Phase	M-15	Prepare Milestone list & Activity list and Sprint Delivery Plan	Yes
Project Development Phase	M-16	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4	Yes

Activity List

Activity number	Activity	Sub activity	Assigned member	Status
1.	Pre requisite		Tejaswini	Completed
2.	Prior Knowledge		Varsha	Completed
3.	Project Objectives		Varshini	Completed
4.	Project Flow		Kala Sree	Completed
5.	Project Structure		Tejaswini	Completed
6.	Data Collection	6.1. Download the Dataset	Varsha	Completed
		6.2. Create Training and Testing Path	Varshini	In-progress
7.	Data Pre-processing	7.1. Importing the libraries.	Kala Sree	In-progress
		7.2. Configure ImageDataGenerator Class	Tejaswini	In-progress
		7.3.Apply ImageDataGenerator Functionality To Train Set And Test Set	Varsha	In-progress
8.	Model Building	8.1 Pre-Trained CNN Model As A Feature Extractor	Varshini	In-progress

		8.2.Adding Dense Layers	Kala Sree	In-progress
		8.3. Configure The Learning Process	Tejaswini	In-progress
		8.4.Train The Model	Varsha	In-Progress
		8.5.Save The Model	Varshini	In-Progress
9.	Create Cloudant DB	9.1. Register & Login To IBM Cloud	Kala Sree	In-progress
		9.2. Create Service Instance	Tejaswini	In-Progress
		9.3.Creating Service Credentials	Varsha	In-Progress
		9.4.Launch Cloudant DB	Varshini	In-Progress
		9.5.Create Database	Kala Sree	In-Progress
10.	Application Building	10.1. Building Html Pages	Tejaswini	In-Progress
		10.2. Build Python Code	Varsha	In-Progress
		10.3. Run The Application	All	In-Progress
11.	Train the Model on IBM	11.1 Register For IBM Cloud	Tejaswini	Completed
		11.2 Train Model On IBM	Varsha	In-Progress
12.	Ideation Phase	12.1 Literature Survey On The Selected Project & Information Gathering	Tejaswini	Completed
		12.2.Prepare Empathy Map	Varsha	Completed
		12.3.Ideation	Tejaswini, Varsha	Completed
13.	Project design phase-I	13.1. Proposed solution	Tejaswini, Kala Sree	Completed
		13.2. Problem Solution Fit	Varsha, Varshini	Completed
		13.3.Solution Architecture	Varsha	Completed
14.	Project Design	14.1.Customer Journey	Varsha	Completed

	Phase-II	14.2.Functional Requirement	Tejaswini	Completed
		14.3.Data Flow diagrams	Tejaswini	Completed
		14.3. Technology Architecture	Varsha	Completed
15.	Project Planning Phase	15.1.Prepare Milestone & Activity List	Varsha, Tejaswini	Completed
		15.2.Sprint Delivery Plan	Varsha	Completed
16.	Project Development Phase	16.1.Project Development-Delivery Of Sprint-1	All	In-Progress
		16.2.Project Development-Delivery Of Sprint-2	All	In-Progress
		16.3.Project Development-Delivery Of Sprint-3	All	In-Progress
		16.4.Project Development-Delivery Of Sprint-4	All	In-Progress