

Project Planning Phase Milestone and Activity List

Date	21 October 2022
Team ID	PNT2022TMID49634
Project Name	Real Time Communication Powered by AI for specially abled people

MILESTONE LIST:

Name	Milestone Number	Description	Mandatory	Optional
Project Objectives	M-001	We will be able to learn how 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, etc...	Yes	
Prior Knowledge	M-004	One should have knowledge on the AI,NLP,CNN and neural network	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	
Test the model	M-008	Import The Packages And Load The Saved Model and Load The Test Image, Pre-Process It And Predict	Yes	
Application Building	M-009	Build the flask application by Load the required packages Initialize graph, load the model, initialize the flask app and load the video and Configure the home page Build an HTML page to display the processed video on the screen, so that the person can show signs which can be detected	Yes	
Train CNN model	M-010	Register for IBM Cloud and train Image Classification Model	Yes	
Ideation Phase	M-011	Prepare Literature Survey on the selected Project and Information Gathering, empathy map and ideation	Yes	
Project Design Phase-I	M-012	Prepare Proposed solution , problem-solution fit and Solution Architecture	Yes	
Project Design Phase-II	M-013	Prepare Customer journey ,functional requirements, Data flow diagram and Technology Architecture	Yes	
Project Planning Phase	M-014	Prepare Milestone list , Activity list and Sprint Delivery Plan	Yes	

Project Development Phase	M-015	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4	Yes	
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ACTIVITY LIST:

Activity Number	Activity Name	Detailed Activity Description	Task Assigned	Status
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 organizing the brainstorm session and prioritize the ideas	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	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.	All Members	COMPLETED

8.2	Model Building	Initializing the model.	All Members	COMPLETED
8.3	Model Building	Adding CNN Layers.	All Members	COMPLETED
8.4	Model Building	Adding Dense Layers	All Members	COMPLETED
8.5	Model Building	Configuring the learning process	All Members	COMPLETED
8.6	Model Building	Training the Model	All Members	COMPLETED
8.7	Model Building	Save the model	All Members	COMPLETED
8.8	Model Building	Predictions	All Members	COMPLETED
8.9	Test the model	Prediction	All Members	COMPLETED
9.0	Application Building	Create Flask Application , HTML page	All Members	COMPLETED
10.1	Train CNN Model on IBM	Register for IBM Cloud	All Members	COMPLETED
10.2	Train CNN Model on IBM	Train Image Classification Model	All Members	COMPLETED