

## MILESTONE AND ACTIVITY LIST

<b>Date</b>	10 November 2022
<b>Team ID</b>	PNT2022TMID40081
<b>Project Name</b>	REAL TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY ABLED
<b>Maximum Marks</b>	4 Marks

## MILESTONE

Pre-Requisites	M-01	In order To complete this project we should have known the following software concepts and packages like Keras, Tensorflow, Python, Anaconda, OpenCV, Flask and so on ...	Yes
Project Structure	M-02	This is the project structure which is needs to be followed for building Conversation Engine	yes
Data collection	M-03	We are gathering data for building our project. We will be creating two folders one for training and the other for testing. Images present in the training folder will be used for building the model and the testing images will be used for validating our model.	Yes
Image Preprocessing	M-04	In this image preprocessing, we will pre-process the images which will be used for building the model. Image pre-processing includes zooming, shearing, flipping to increase the robustness of the model after it is built. We will be using the Keras package for pre-processing images.	Yes

Model Building	M-05	In this milestone, we start building our model through Initializing the model, Adding Convolution layers, Adding Pooling layers, Flatten layer, Full connection layers which include hidden layers At last, we compile the model with layers we added to complete the neural network structure.	Yes
Test the model	M-06	Now we test the model by passing an image to get predictions. While testing the model we should make sure that the test image should meet the target size of the model, dimensions need to meet, and	Yes

		should undergo rescaling before giving it to the model.	
Application layer	M-07	We will be building a Flask application that is used for building our UI which in backend can be interfaced to the model to get predictions. Flask application requires an HTML page for Frontend and a Python file for the backend which takes care of the interface with the model.	Yes

Train CNN model	M-08	You can also train your Image classification Models on IBM Cloud using IBM Watson Studio Service. This milestone lets you :Train your model on IBM, Store your Model on IBM , Download the Stored model to the Local system .	Yes
Ideation Phase	M-09	To Prepare Literature Survey on the selected Project and the Information Gathering, empathy map and ideation	Yes
Project Design Phase-I	M-10	From this milestone you will be continue working on the project design .you are expected to cover the activities in given	Yes
Project Design Phase-II	M-11	From this milestone you will be continue working on the project design phase. You are expected to cover the activities in given.	Yes
Project Planning Phase	M-12	From this milestone you are expected to prepare milestones & tasks, sprint schedules.	Yes

Project Development Phase	M-13	From this milestone you will start the project development and expected to perform the coding & solutioning, acceptance testing, performance testing based as per the sprint and submit them.	Yes
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## ACTIVITY LIST

Activity Number	Activity	Sub Activity	Assigned To	Status
1.	PRE-REQUISITES	To complete this project, you must require the following software's, concepts, and packages <b>Anaconda (IDE/Spyder/PyCharm)(Python 3.7).</b>	All Members	Completed
2.	PROJECT STRUCTURE	<ul style="list-style-type: none"> <li>➤ Dataset</li> <li>➤ Test_set</li> <li>➤ Training_set</li> <li>➤ Static</li> <li>➤ Images</li> <li>➤ templates</li> </ul>	All Members	Completed
3.	DATA COLLECTION	create train and test folders, dataset can also be downloaded from the reference provides.	All Members	Completed

4.	IMAGE PREPROCES SING	<ul style="list-style-type: none"> <li>➤ Import image data generator library and configure it.</li> <li>➤ Apply image data generator functionality to train and test set</li> </ul>	All Members	Completed
5.	MODEL BUILDING	<ul style="list-style-type: none"> <li>➤ Import the required model building libraries.</li> <li>➤ Initialize the model.</li> <li>➤ Add the convolution layer.</li> <li>➤ Add the pooling layer.</li> <li>➤ Add the flatten layer.</li> <li>➤ Adding the dense layers.</li> <li>➤ Compile the model.</li> <li>➤ Fit save the model.</li> </ul>	All Members	Completed

6.	TEST THE MODEL	<ul style="list-style-type: none"> <li>➤ Import the packages and load the saved model.</li> <li>➤ Load the test image pre-process it and predict.</li> </ul>	All Members	Completed
7.	APPLICATION BUILDING	<ul style="list-style-type: none"> <li>➤ Build a flask application.</li> <li>➤ Build a flask application.</li> <li>➤ Building flask application – part 3.</li> <li>➤ Build the HTML page.</li> <li>➤ output</li> </ul>	All Members	Completed
8.	TRAIN CNN MODEL ON IBM	<ul style="list-style-type: none"> <li>➤ Register for IBM cloud.</li> <li>➤ Train image classification model.</li> </ul>	All Members	In progress
9.	IDEATION PHASE	<ul style="list-style-type: none"> <li>➤ Literature survey on the selected project</li> </ul>	All Members	Completed

		& inform ation gatheri ng. ➤ Prepare empath y map. ➤ Ideatio n.		
10.	PROJECT DESIGN PHASE – I	➤ Propose d solutio n.  ➤ Problem solutio n fit.  ➤ Solution archite cture.	All Members	Completed

11.	PROJECT DESIGN PHASE -II	<ul style="list-style-type: none"> <li>➤ Customer journey.</li> <li>➤ Functional requirement.</li> <li>➤ Data flow diagrams.</li> <li>➤ Technology Architecture.</li> </ul>	All Members	Completed
12.	PROJECT PLANNING PHASE	<ul style="list-style-type: none"> <li>➤ Prepare milestone &amp; activity list.</li> <li>➤ Sprint delivery plan</li> </ul>	All Members	In process