

## Project Planning Phase

### Project Planning Template(Milestone & Activity List)

Date	31 October 2022
Team ID	PNT2022TMID02070
Project Name	Real-Time Communication System Powered by AI for Specially Abled

Milestone No.	Milestone	Task Description	Milestone status
<b>Milestone 1</b>	<b>Ideation Phase</b>		
	Literature survey on selected project and Information gathering	In this activity, we are expected to gather/collect the relevant information on the project use case, and refer to the existing solutions, technical papers, research publications, etc.	Completed
	Problem Statement	About the problem faced by customers And what solution we are giving.	Completed
	Prepare Empathy Map	In this activity, we are expected to prepare the empathy map canvas to capture the user's Pains & Gains, Prepare a list of problem statements.	Completed
	Ideation	In this activity, we are expected to list the ideas (at least 4 per team member) by organizing the brainstorming session and prioritize the top 3 ideas based on their feasibility & importance.	Completed
<b>Milestone 2</b>	<b>Project Design Phase -I</b>		
	Proposed Solution	In this activity, we are expected to prepare the proposed solution document, which includes the novelty, feasibility of the idea, business model, social impact, scalability of the solution, etc.	Completed
	Problem Solution Fit	In this activity, we are expected to prepare a problem–solution–fit document and submit it for review.	Completed
	Solution Architecture	In this activity, we are expected to prepare a solution architecture document and submit it for review.	Completed
<b>Milestone 3</b>	<b>Project Design Phase - II</b>		
	Customer Journey	Prepared the customer journey maps to understand the user interactions & experiences with the application (entry to exit).	Completed
	Functional Requirement	In this activity, we are expected to prepare the functional requirement document	Completed

	Data Flow Diagrams	In this activity, we are expected to prepare the data flow diagrams and submit them for review.	Completed
	Technology Architecture	In this activity, we are expected to draw the technology architecture diagram.	Completed
Milestone 4	Project Planning Phase	In this activity, we are expected to prepare the milestones & activity list of the project.	Completed
	Prepare Milestone & Activity List		
	Sprint Delivery Plan	In this activity, we are expected to prepare the sprint delivery plan.	In Progress
Milestone 5	Project Development Phase	In this milestone, we will start the project development and expect to perform the coding & solutions, acceptance testing, and performance testing based on the sprint and submit them.	In Progress
	Development of Sprint 1,2,3,4		
Milestone 6	Data Collection	In this, we will be collecting 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.	
Milestone 7	Image Preprocessing	In this, we will pre-process the images which will be used for building the model. Image pre-processing includes zooming, shearing, and flipping to increase the robustness of the model after it is built. We will be using the Keras package for pre-processing images.	
Milestone 8	Model Building	Initializing, adding convolutional layers and pooling layers, Flattening layers, full connection layers	
Milestone 9	Test The Model	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, the dimensions need to meet and should undergo rescaling before giving it to the model.	
Milestone 10	Application Building	Now we will be building a Flask application that is used for building our UI which in the backend can be interfaced with 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	
Milestone 11	Train CNN Model On IBM	Register for IBM cloud and Train image classification Model.	