

## Project Planning Phase

### Milestone and Activity list

Team ID	PNT2022TMID14136
Project Name	DemandEst - AI powered Food Demand Forecaster
Maximum Marks	8 Marks

### Completed Tasks:

MILESTONES	ACTIVITY	DESCRIPTION
Ideation phase	Literature survey	Literature survey on selected project and gathering information.
	Empathy map	Prepare empathy map to capture the user pains and gains, prepare a list of problem statement.
	Ideation	Organising the brainstorming session and prioritise the top three ideas based on feasibility and importance.
Project design phase 1	Proposed solution	Prepare proposed solution document which includes novelty, feasibility of ideas, business model, social impact, scalability of solution.

	Problem solution fit	Prepare problem solution fit Documents.
	Solution architecture	Prepare solution architecture document.

Project design phase 2	Customer journey map	Prepare customer journey map to understand the user interactions and experience with the application.
	Functional requirements	Prepare functional and non-functional necessity document.
	Data flow diagram	Prepare data flow diagram and user stories
	Technology architecture	Draw technology architecture diagram
Project planning phase	Milestones and activity list	Prepare milestones and activity list of the project.
	Sprint delivery plan	Planning of sprints
Pre-Requisites	In Order To Develop This Project,We Need To Install Following Software's/Package	Anaconda Navigator
	To Build Machine Learning Models You Must Require The Following Packages	Numpy Pandas Sicikit-learn Matplotlib and Seaborn Flask
Dataset Collection	Collect The Dataset or Create The Flask	train.csv test.csv fulfilment_center_info.csv meal_info.csv
Data Pre-Procesing	Importing The Libraries	Pandas

		NumPy
	Reading The Dataset	Read_csv()
	Exploratory Data Analysis	train.head() test.head()
	Checking For Null Values	train.isnull().sum()
	Reading And Merging.csv Files	meal_id center_id
	Dropping Columns	center_id meal_id trainfinal
	Label Encoding	scikit_learn trainfinal.head()
	Data Visualization	Data visualization is where a given data set is presented in a graphical format
	Splitting The Dataset into Dependent And Independent Variable	homepage_featured emailer_for_promotion op_area cuisine city_code region_code
	Split The Dataset Into Train Set And Test Set	train_test_split Train Dataset Test Dataset test_size train_size train_test_split
Model Building	Train And Test Model Application	There are several Machine learning algorithm to be used depending on the data you are going to process such as images,sound,text and numerical values.
	Model Evaluation	We're going to use x_train and y_train obtained above in

		train_test_split section to train our regression model.
	Save The Model	After building the model we have to save the model.
	Predicting The Output Using The Model	Here,we are creating X_test which are using to test the model to predict the number of orders by giving input to the model build.
Application Building	Create An HTML File	We use HTML to create the font-end part of the web page.
	Build Python Code	Let us build flask file 'apply.py' which is a web framework written in python for server - side scripting.
	Run The App	Run the application from anaconda prompt.
Train The Model On IBM	Register For IBM Cloud	Create IBM Account
	Train The ML Model On IBM	Watch The Video To Train The Machine Learning Model On IBM Watson.
	Integrate Flask With Scoring End Point	Watch The Video To Integrate The Scoring Endpoint To The Flask

**Remaining Tasks:**

MILESTONES	ACTIVITY	DESCRIPTION
Project Development Phase	Project Development Delivery Of Sprint-1	In this activity are expected to develop & submit the developed code by testing it.
	Project Development Delivery Of Sprint-2	In this activity are expected to develop & submit the developed code by testing it.
	Project Development Delivery Of Sprint-3	In this activity are expected to develop & submit the developed code by testing it.
	Project Development Delivery Of Sprint-4	In this activity are expected to develop & submit the developed code by testing it.