

## Project Planning Phase

### Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	03 November 2022
Team ID	PNT2022TMID08854
Project Name	Project – DemandEst - AI Powered Food Demand Forecaster
Maximum Marks	8 Marks

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirements (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Pre – Requisites	USN-1	A prerequisite is a required prior condition. If something is required in advance of something else, like if you have to take a beginning Spanish class before signing up for Spanish, then it's a prerequisite.	10	Low	Gokul Logesh Balamurugan
Sprint-1	Dataset collection	USN-2	A tool in Agile software development used to capture a description of a software feature from a user's perspective.	10	Medium	Chethan Gokul Logesh Balamurugan
Sprint-2	Data Pre-Processing. Importing the libraries	USN-3	In this post I am going to walk through the implementation of Data Pre-processing methods using Python.	5	High	Chethan Tharun Logesh Balamurugan
Sprint-2	Reading the dataset. Exploratory data analysis	USN-4	Exploratory Data Analysis refers to the critical process of performing initial investigations on data so as to discover patterns, to spot anomalies, to test hypothesis and to check assumptions with the help of summary.	5	High	Tharun Chethan Balamurugan Logesh
Sprint-2	Checking for null values. Reading and merging.csv files.	USN-5	A null indicates that a variable doesn't point to any object and holds no value. Step 1: Create & Export Multiple Data Frames. First, we'll use the following code to create and export three data frames to CSV files: #create three data frames df1 <- data. ... Step 2:	2	Medium	Tharun Balamurugan Logesh

Sprint	Functional Requirements (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Dropping columns. Label encoding	USN-6	First, you define the table name from which you wish to remove or delete the column. Label Encoding refers to converting the labels into a numeric form so as to convert them into the machine-readable form.	6	Medium	Tharun Balamurugan Logesh
Sprint-2	Splitting the dataset into dependent and independent variable. Split the dataset into train set and test set	USN-7	The simplest way to split the modelling dataset into training and testing sets is to assign 2/3 data points to the former and the remaining one-third to the latter.	2	Low	Tharun Balamurugan Logesh
Sprint-3	Model Building	USN-8	What the person using the product wants to Be able to do. A traditional requirement focuses on functionality.	10	High	Gokul Chethan Tharun
Sprint-3	Train and test model algorithms Model evaluation	USN-9	The train-test split procedure is used to estimate the performance of machine learning algorithms when they are used to make predictions on data.	5	Low	Gokul Chethan Tharun
Sprint-3	Save the model. Predicting the output using the model.	USN-10	predict passes the input vector through the model and returns the output tensor for each datapoint.	5	Medium	Gokul Chethan Tharun
Sprint-4	Application building. Create an HTML file	USN-11	An app builder is an online software tool that allows everyone to create and publish apps for mobile devices without code development.	10	High	Gokul Chethan Logesh
Sprint-4	Build python code. Run the app	USN-12	A tool provided by the Python Packaging Authority (PyPA) for building Python packages.	10	High	Gokul Chethan Logesh

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
Sprint-1	7	6 Days	24 Oct 2022	29 Oct 2022	7	29 Oct 2022
Sprint-2	4	9 Days	30 Oct 2022	07 Nov 2022	4	05 Nov 2022
Sprint-3	6	7 Days	08 Nov 2022	14 Nov 2022	6	12 Nov 2022
Sprint-4	2	7 Days	15 Nov 2022	21 Nov 2022	2	19 Nov 2022

**Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

$$AV \text{ (Sprint 1)} = 7/6 = 1$$

$$AV \text{ (Sprint 2)} = 4/6 = 1$$

$$AV \text{ (Sprint 3)} = 6/6 = 1$$

$$AV \text{ (Sprint 4)} = 2/6 = 1$$

$$AV \text{ (Total )} = 21/24 = 1$$

**Burndown Chart:**

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

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