

## Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID14581
Project Name	Crude Oil Price Prediction
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 Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-1	Download Crude Oil Price Dataset	2	Medium	Sowndhar S
Sprint-1	Data Preprocessing	USN-2	Importing The Dataset into Workspace	1	Low	Vishal KB
Sprint-1		USN-3	Handling Missing Data	3	Medium	Bothi Prasaadh
Sprint-1		USN-4	Feature Scaling	3	Low	Kaviyarasan
Sprint-1		USN-5	Data Visualization	3	Medium	Vishal KB
Sprint-1		USN-6	Splitting Data into Train and Test	4	High	Sowndhar S
Sprint-1		USN-7	Creating A Dataset with Sliding Windows	4	High	Sowndhar S
Sprint-2	Model Building	USN-8	Importing The Model Building Libraries	1	Medium	Bothi Prasaadh
Sprint-2		USN-9	Initializing The Model	1	Medium	Kaviyarasan N
Sprint-2		USN-10	Adding LSTM Layers	2	High	Bothi Prasaadh
Sprint-2		USN-11	Adding Output Layers	3	Medoum	Kaviyarasan
Sprint-2		USN-12	Configure The Learning Process	4	High	Vishal KB

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-2		USN-13	Train The Model	2	Medium	Sowndhar S
Sprint-2		USN-14	Model Evaluation	1	Medium	Kaviyarasan
Sprint-2		USN-15	Save The Model	2	Medium	Vishal KB
Sprint-2		USN-16	Test The Model	3	High	Vishal KB
Sprint-3	Application Building	USN-17	Create An HTML File	4	Medium	Bothi Prasaadh
Sprint-3		USN-18	Build Python Code	4	High	Sowndhar S
Sprint-3		USN-19	Run The App in Local Browser	4	Medium	Kaviyarasan
Sprint-3		USN-20	Showcasing Prediction On UI	4	High	Vishal KB
Sprint-4	Train The Model On IBM	USN-21	Register For IBM Cloud	4	Medium	Bothi Prasaadh
Sprint-4		USN-22	Train The ML Model On IBM	8	High	Sowndhar S
Sprint-4		USN-23	Integrate Flask with Scoring End Point	8	High	Kaviyarasan

**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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	03 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	10 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	17 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)

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



### Burndown Chart:

A burn down 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.

