

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

Date	28 October2022
Team ID	PNT2022TMID12637
Project Name	Crude Oil Price Prediction
Maximum Marks	8 Marks

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

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	All
Sprint-1	Data Preprocessing	USN-2	Importing The Dataset into Workspace	1	Low	All
Sprint-1		USN-3	Handling Missing Data	3	Medium	All
Sprint-1		USN-4	Feature Scaling	3	Low	All
Sprint-1		USN-5	Data Visualization	3	Medium	All
Sprint-1		USN-6	Splitting Data into Train and Test	4	High	All
Sprint-1		USN-7	Creating A Dataset with Sliding Windows	4	High	All
Sprint-2	Model Building	USN-8	Importing The Model Building Libraries	1	Medium	All
Sprint-2		USN-9	Initializing The Model	1	Medium	All
Sprint-2		USN-10	Adding LSTM Layers and GRU Layers	2	High	All
Sprint-2		USN-11	Adding Output Layers	3	Medium	All
Sprint-2		USN-12	Configure The Learning Process	4	High	All

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

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date(Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date(Actual)
Sprint-1	20	6Days	24Oct2022	29Oct2022	20	29Oct2022
Sprint-2	20	6Days	31Oct2022	05Nov2022	20	03Nov2022
Sprint-3	20	6Days	07Nov2022	12Nov2022	20	10Nov2022
Sprint-4	20	6Days	14Nov2022	19Nov2022	20	17Nov2022

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)

$$AV = \frac{\text{Sprint duration}}{\text{Velocity}} = \frac{20}{6} = 3.33$$

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, burndown charts can be applied to any project containing measurable progress over time.

