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

Date	22 October 2022
Team ID	PNT2022TMID13214
Project Name	Crude Oil Price Prediction

Product Backlog, Sprint Schedule, and Estimation

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	Arjun V Jaswant G Ranjith Kumar T Sanjay Krishna Sriram
Sprint-1	Data Preprocessing	USN-2	Importing The Dataset into Workspace	1	Low	Arjun V Jaswant G
Sprint-1		USN-3	Handling Missing Data	3	Medium	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-1		USN-4	Feature Scaling	3	Low	Arjun V Jaswant G
Sprint-1		USN-5	Data Visualization	3	Medium	Ranjith Kumar T Sanjay Krishna Sriram

Sprint-1		USN-6	Splitting Data into Train and Test	4	High	Arjun V Jaswant G
Sprint-1		USN-7	Creating A Dataset with Sliding Windows	4	High	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-2	Model Building	USN-8	Importing The Model Building Libraries	1	Medium	Arjun V Jaswant G
Sprint-2		USN-9	Initializing The Model	1	Medium	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-2		USN-10	Adding LSTM Layers	2	High	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-2		USN-11	Adding Output Layers	3	Medium	Arjun V Jaswant G
Sprint-2		USN-12	Configure The Learning Process	4	High	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-2		USN-13	Train The Model	2	Medium	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-2		USN-14	Model Evaluation	1	Medium	Arjun V Jaswant G
Sprint-2		USN-15	Save The Model	2	Medium	Arjun V Jaswant G
Sprint-2		USN-16	Test The Model	3	High	Ranjith Kumar T Sanjay Krishna Sriram

Sprint-3	Application Building	USN-17	Create An HTML File	4	Medium	Arjun V Jaswant G
Sprint-3		USN-18	Build Python Code	4	High	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-3		USN-19	Run The App in Local Browser	4	Medium	Arjun V Jaswant G
Sprint-3		USN-20	Showcasing Prediction On UI	4	High	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-4	Train The Model OnIBM	USN-21	Register For IBM Cloud	4	Medium	Arjun V Jaswant G
Sprint-4		USN-22	Train The ML Model On IBM	8	High	Ranjith Kumar T Sanjay Krishna Sriram
Sprint-4		USN-23	Integrate Flask with Scoring End Point	8	High	Arjun V Jaswant G

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	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)

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

VELOCITY CHART

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 suchas Scrum. However, burn down charts can be applied to any project containing measurable progress over time.