

Project Planning Phase

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

Date	27 October 2023
Team ID	Team - 592521
Project Name	Project – Online Shoppers Intention Prediction
Maximum Marks	8 Marks

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

create product backlog and sprint schedule

Sprint	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	USN-1	Collect user browsing data for analysis	3	High	1
Sprint-1	USN-2	Implement Logistic Regression for prediction	5	High	2
Sprint-2	USN-3	Explore and preprocess data for Random Forest algorithm	4	Medium	1
Sprint-2	USN-4	Train Random Forest model and evaluate performance	5	High	2
Sprint-3	USN-5	Implement K-Means clustering for user segmentation	4	Low	2
Sprint-3	USN-6	Evaluate and fine-tune clustering model	3	Medium	1
Sprint-4	USN-7	Analyze user behavior patterns and adjust models	4	High	2
Sprint-4	USN-8	Optimize and document the machine learning pipeline	4	Medium	2
Sprint-5	USN-9	Conduct user testing and gather feedback	3	Medium	1
Sprint-5	USN-10	Finalize predictive model	5	High	2
Sprint-6	USN-11	Deploy the model	5	High	3

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	8	6 Days	24 Oct 2023	29 Oct 2023	8	29 Oct 2023
Sprint-2	9	6 Days	31 Oct 2023	05 Nov 2023	9	31 Oct 2023
Sprint-3	7	6 Days	07 Nov 2023	12 Nov 2023	7	07 Nov 2023
Sprint-4	8	6 Days	14 Nov 2022	19 Nov 2022	8	14 Nov 2022
Sprint-5	8	6 Days	20 Nov 2023	26 Nov 2023	8	20 Nov 2023

The graph shows the difference between estimated and actual hours over a 6-day period. The y-axis represents hours from 0 to 60, and the x-axis represents days from 0 to 6. The 'Estimated' line is a straight blue line starting at 60 hours on day 0 and ending at 0 hours on day 6. The 'Actual' line is an orange line that starts at 60 hours on day 0, remains above the estimated line until day 2, crosses below it at day 3, remains below it until day 4, crosses back above it at day 5, and ends at 0 hours on day 6.

Days	Estimated (Hours)	Actual (Hours)
0	60	60
1	50	52
2	40	42
3	30	28
4	20	16
5	10	8
6	0	0

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)

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