Project Planning Phase

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

Date	18 October 2023
Team ID	PNT2022TMIDxxxxxx
Project Name	Project - Falcon
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	As a data engineer, I can collect historical launch data, telemetry data, and weather data from APIs for analysis.	3	High	
Sprint-1	Data Collection	USN-2	As a data scientist, I can store the collected data in a cloud storage solution for future processing and analysis.	2	High	
Sprint-2	Data Preprocessing	USN-3	As a data scientist, I can clean and preprocess the collected data to remove inconsistencies and prepare it for modeling.	3	Low	
Sprint-3	Feature Engineering	USN-4	As a data scientist, I can create new features based on raw data to improve model accuracy.	2	Medium	
Sprint-3	Model Training	USN-5	As an ML engineer, I can train multiple models (Logistic Regression, SVM, etc.) to predict the landing outcome.	5	High	
Sprint-4	Model Evaluation	USN-6	As an ML engineer, I can evaluate models and select the best-performing one based on accuracy, precision, and recall.	3	high	

Sprint-4	Model Deployment	USN-7	As a system admin, I can deploy the best model in a cloud environment for real-time prediction capabilities.	4	High	
Sprint-4	Dashboard & Reporting	USN-8	As a data analyst, I can view prediction results and model performance metrics on a dashboard.	2	high	

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	18	6 Days	31 Oct 2022	5 Nov 2022	18	5 Nov 2022
Sprint-3	22	7 Days	7 Nov 2022	13 Nov 2022	20	14 Nov 2022
Sprint-4	24	7 Days	15 Nov 2022	21 Nov 2022	22	22 Nov 2022

Velocity:

Velocity Calculation

The velocity is the average number of story points completed per sprint:

$$\text{Velocity} = \frac{\text{Total Story Points Completed}}{\text{Total Number of Sprints}} = \frac{80}{4} = 20 \text{ points per sprint}$$

Burndown Chart Overview

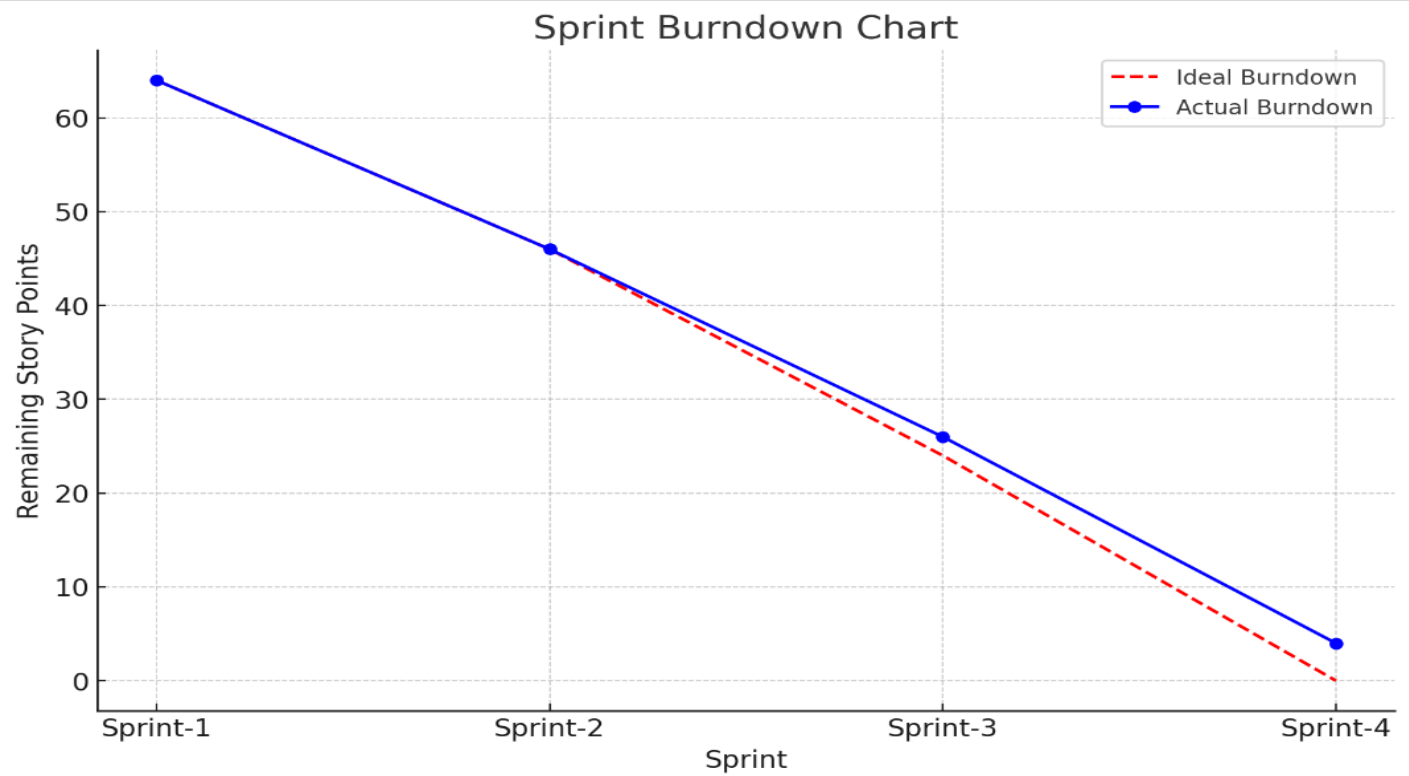
The burndown chart would show the planned story points remaining vs. actual story points completed over each sprint duration. For example:

- **Sprint-1**: 20 story points planned, 20 completed
- **Sprint-2**: 18 story points planned, 18 completed
- **Sprint-3**: 22 story points planned, 20 completed
- **Sprint-4**: 24 story points planned, 22 completed

This chart can visually track the progress and ensure alignment with project goals, highlighting any delays or changes in completion rates.

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.



https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts