Project Planning Phase

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

Date	26 October 2023
Team ID	PNT2022TMID593144
Project Name	Advanced Traffic Volume Estimation with Machine Learning
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	Accurate traffic measurement and prediction	USN-1	As a government official, I want a system that can accurately measure and predict traffic volume at various locations, so I can make informed decisions regarding infrastructure development and traffic management.	2	High	R Sriram D Vishaal
Sprint-2		USN-2	As a commuter, I can receive real-time traffic updates and alerts on my mobile device, so I can plan my daily commute more efficiently and avoid severe traffic congestion.	1	High	R Sriram D Vishaal
Sprint-3	Traffic Rule Violation Identification	USN-3	As a traffic management officer, I need a tool that can identify violations of traffic rules, allowing us to take necessary enforcement actions to improve road safety.	2	Low	R Sriram D Vishaal
Sprint-4	API for Integration	USN-4	As a software developer, I want access to a well-documented API that allows me to integrate traffic data into third-party applications or services, enhancing the accessibility of traffic information.	2	Medium	R Sriram D Vishaal
Sprint-5	Reporting and Visualization	USN-5	As a city official, I need the system to generate reports and visualizations that	1	High	R Sriram D Vishaal

			are easy to understand and share with the public, helping to increase awareness of traffic-related issues.			

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	3 Days	28 Oct 2023	30 Oct 2023	20	30 Oct 2022
Sprint-2	20	3 Days	30 Oct 2023	2 Nov 2023	20	2 Nov2023
Sprint-3	20	3 Days	2 Nov 2023	5 Nov 2023	20	5 Nov 2023
Sprint-4	20	3 Days	5 Nov 2023	8 Nov 2023	20	8 Nov 2023

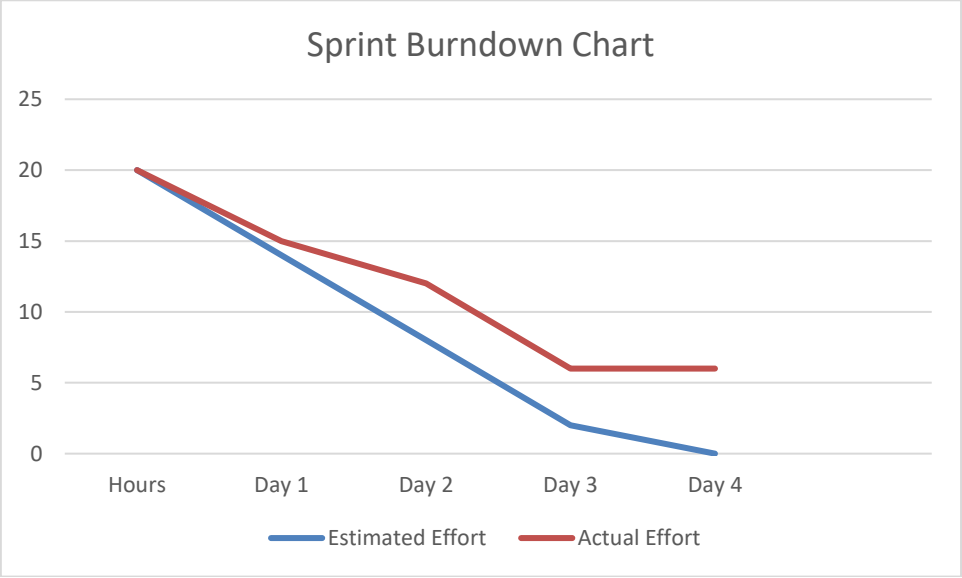
Velocity:

Imagine we have a 6-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)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{3} = 6.6 \approx 6$$

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