

Project Planning Phase

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

Date	15 February 2025
Team ID	LTVIP2025TMID21141
Project Name	Edu Tutor AI: Personalized Learning With Generative AI and LMS Integration
Maximum Marks	5 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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Mathineni Karthik
Sprint-1	Quiz Generation (AI)	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Mathineni Karthik
Sprint-2	Social Login	USN-3	As a user, I can register for the application through Facebook	2	Low	Mikkili Viswas Abhishikth
Sprint-1	Social Login	USN-4	As a user, I can register for the application through Gmail	2	Medium	Mullapudi Sowmya Bharathi
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Meesala Sai
Sprint-2	Dashboard	USN-6	As a student, I can view my quiz results and progress in a dashboard	3	High	Mullapudi Sowmya Bharathi
Sprintt-2	Dashboard	USN-7	As a teacher, I can track student performance and download reports	3	Medium	Meesala Sai,Abhishikth

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	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	19	06 July 2025
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	18	13 July 2025
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	20 July 2025

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)

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

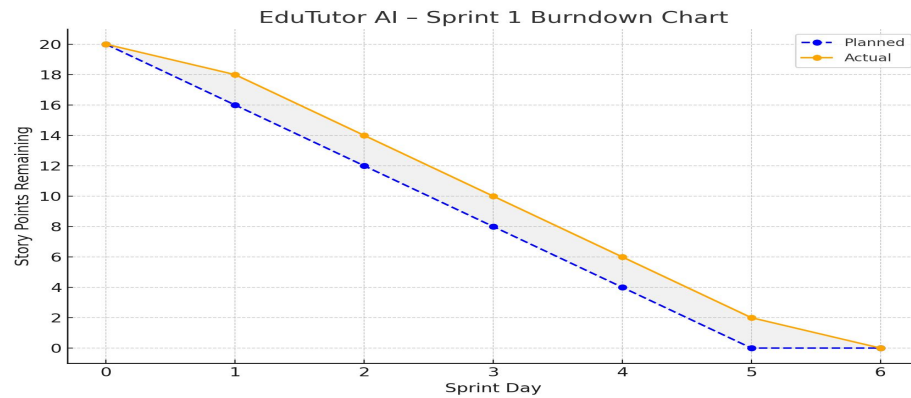
Average velocity (AV) =

Total Completed Story Points across 4 Sprints ÷ Total Days = (20+19+18+20) ÷ (4×6) = 77 ÷ 24 ≈ 3.21 story points per day

Team's average velocity = 3.21 story points/day

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.



Sprint 1 – Burndown Chart (Description)

The **Sprint 1 Burndown Chart** visualizes the reduction in story points over the 6-day sprint. It shows both the **Planned** and **Actual** progress lines:

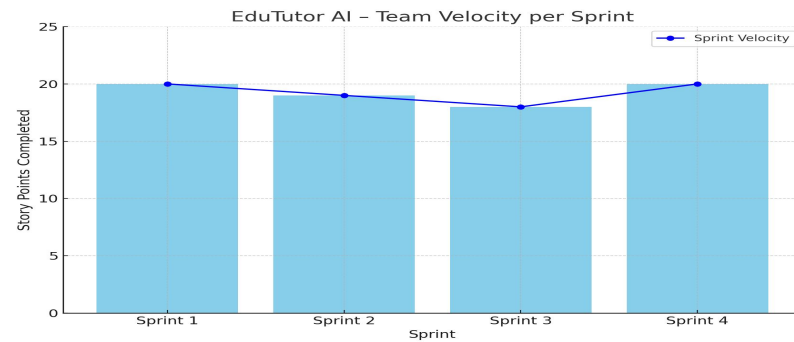
The **Planned line** assumes a steady daily completion of work (linear decline).

The **Actual line** reflects the real pace of the team.

The team successfully **completed all 20 story points** by Day 6, aligning well with the planned schedule.

Minor lag on Days 1 and 2 was quickly recovered, indicating good sprint management and coordination.

This chart demonstrates that the team worked consistently and maintained velocity, successfully achieving sprint goals.



Sprint Velocity Chart – Sprint 1 to 4 (Description)

The **Velocity Chart** shows the number of story points completed in each sprint across four consecutive sprints:

Sprint 1: 20 points

Sprint 2: 19 points

Sprint 3: 18 points

Sprint 4: 20 points

This trend indicates:

A consistently high performance across all sprints.

Slight dip in Sprints 2 and 3 due to minor delays or additional complexity.

Full recovery in Sprint 4, showing adaptability and improved collaboration.

The **average team velocity** is **19.25 story points per sprint**, which is a strong indicator of steady and reliable progress.