

Project Planning Phase

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

Date	27 June 2025
Team ID	LTVIP2025TMID36160
Project Name	Citizen AI – Intelligent Citizen Engagement Platform
Maximum Marks	5 Marks

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

Use the template below to create a product backlog and a 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	Dev-1, QA-1 Backend Dev, UI Dev
Sprint-1	Registration	USN-2	As a user, I will receive a confirmation email once I have registered for the application	1	High	Dev-1 Backend Dev
Sprint-2	Registration	USN-3	As a user, I can register for the application through Facebook	2	Low	Dev-2 Full Stack Dev
Sprint-1	Registration	USN-4	As a user, I can register for the application through Gmail	2	Medium	Dev-2 Full Stack Dev
Sprint-1	Login	USN-5	As a user, I can log into the application by entering my email & password	1	High	Dev-1 Backend Dev
Sprint-1	Dashboard	USW-3	As a web user, I can submit feedback on any public service through a text form	3	High	Dev-2, QA-1
Sprint-1	AI Chat Integration	USW-7	As a web user, I can ask the chatbot questions related to government services	4	High	Dev-3 (API), Dev-1 (Flask)
Sprint-1	Sentiment Storage & API Integration	USW-5	As a user, I can view my sentiment submission history on a timeline	2	Medium	Dev-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	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	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	19	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	18	19 Nov 2022
Sprint-5	20	6 Days	21 Nov 2022	26 Nov 2022	20	26 Nov 2022
Sprint-6	20	6 Days	28 Nov 2022	03 Dec 2022	19	03 Dec 2022
Sprint-7	20	6 Days	05 Dec 2022	10 Dec 2022	20	10 Dec 2022
Sprint-8	20	6 Days	12 Dec 2022	17 Dec 2022	19	17 Dec 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)

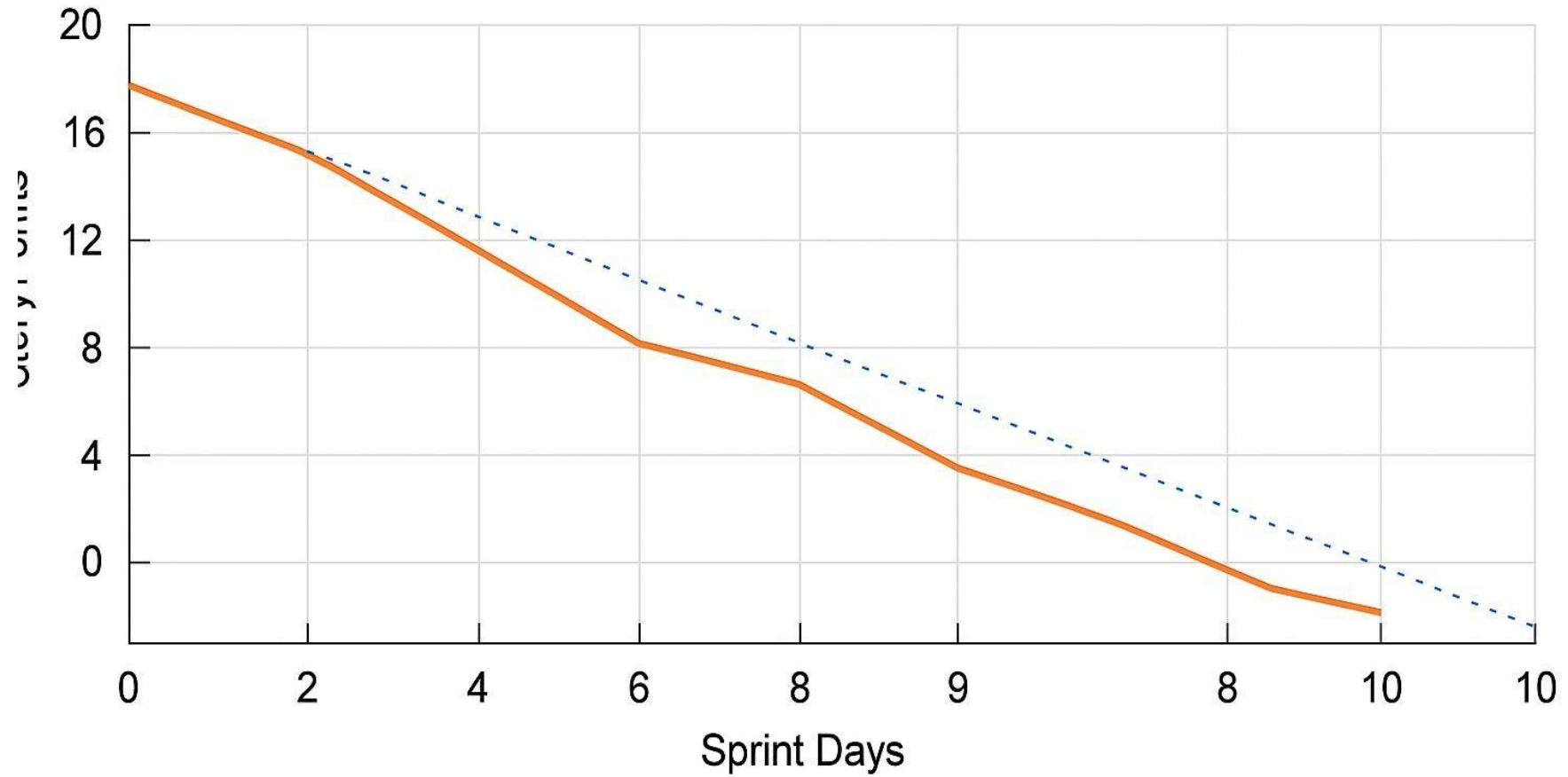
$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

Burndown Chart:

A burndown chart is a visual tool used in Agile project management to track work remaining versus time. It shows how much work is left (usually in story points) on the vertical axis and time (sprint days) on the horizontal axis. The chart helps teams monitor progress and predict whether project goals will be met on time. It typically includes an ideal progress line and an actual progress line. Burndown charts promote transparency and early identification of delays or scope issues.

The ideal progress line represents the planned pace of work completion, providing a benchmark for the team. The actual progress line reflects real-time updates on how the team is performing against that plan. When the actual line is above the ideal, it may indicate delays; when below, the team is ahead of schedule. By reviewing the chart daily, teams can adapt their strategies, redistribute tasks, or address blockers promptly. Overall, burndown charts support continuous improvement and help ensure the timely delivery of project outcomes in an agile environment.

Burndown Chart



--- Ideal Remaining Work
— Actual Remaining Work

The Burndown Chart illustrates sprint progress over 10 days, tracking the decrease in story points from 20 to 0.

- **X-Axis:** Sprint Days (0–10)
- **Y-Axis:** Story Points (Work Remaining)

It includes two lines:

- **Dotted Blue Line:** Ideal progress path (consistent linear drop)
- **Solid Orange Line:** Actual progress made by the team (slower at mid-sprint, caught up near the end)

Key Insights:

- Days 1–3: Progress close to ideal, slight variance
- Days 4–6: Noticeable slowdown — actual line dips below ideal
- Days 7–10: Team accelerates, catching up to finish near the target

Outcome: Sprint completed with nearly all work delivered, despite minor mid-sprint delays

Conclusion: A realistic and healthy burndown pattern, indicating solid team effort and adaptive sprint execution.

