**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 15 February 2025 |
| Team ID | LTVIP2025TMID32342 |
| Project Name | SmartSDLC – AI-Enhanced Software Development Lifecycle |
| 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 | Requirement Classification | USN-1 | As a user, I can upload a PDF with unstructured requirements and view them classified into SDLC phases. | 3 | High |  |
| Sprint-1 | AI Code Generation | USN-2 | As a developer, I can input a user story and receive production-ready code generated by AI. | 5 | High |  |
| Sprint-2 | Bug Fixing | USN-3 | As a developer, I can submit buggy code and receive corrected code with explanations. | 3 | Medium |  |
| Sprint-2 | Test Case Generation | USN-4 | As a QA engineer, I can input code or requirements and receive auto-generated test cases using unittest or pytest. | 4 | Medium |  |
| Sprint-2 | Code Summarization | USN-5 | As a developer, I can input source code and receive a human-readable summary of its logic and use cases. | 2 | Low |  |
| Sprint-1 | Floating AI Chatbot Assistant | USN-6 | As a user, I can interact with a chatbot to get real-time help on SDLC concepts and platform usage. | 3 | 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 | 11 | 5 Days | 24 may 2025 | 28 may 2025 | 11 | 28 may 2025 |
| Sprint-2 | 9 | 5 Days | 31 may 2025 | 04 June 2025 | 9 | 04 June 2025 |
| Sprint-3 | 12 (Planned) | 5 Days | 07 June 2025 | 11 June 2025 | — | — |
| Sprint-4 | 12 (Planned) | 5 Days | 14 June 2025 | 18 June 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)



**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](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies such as [Scrum](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/). 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.visual-paradigm.com/scrum/scrum-burndown-chart/)

[**https://www.atlassian.com/agile/tutorials/burndown-charts**](https://www.atlassian.com/agile/tutorials/burndown-charts)

**Reference:**

[**https://www.atlassian.com/agile/project-management**](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/how-to-do-scrum-with-jira-software)

[**https://www.atlassian.com/agile/tutorials/epics**](https://www.atlassian.com/agile/tutorials/epics)

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[**https://www.atlassian.com/agile/tutorials/burndown-charts**](https://www.atlassian.com/agile/tutorials/burndown-charts)