**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 15 February 2025 |
| Team ID | LTVIP2025TMID32164 |
| 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 | Authentication | USN-1 | As a user, I can register/login using email and password | 2 | High | Chittareddy Praveen Kumar |
| Sprint-1 | Requirement Classification | USN-2 | As a user, I can upload a document and get functional/non-functional classification | 3 | High | Bonthu Sai Chandrika |
| Sprint-1 | AI Code Generation | USN-3 | As a user, I can input a requirement and receive generated Python code | 3 | High | Bollina Lavanya |
| Sprint-1 | Bug Detection/Fixing | USN-4 | As a user, I can input faulty code and receive corrected output | 3 | Medium | |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | C Anvesh Reddy | |  |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | |  | | |
| Sprint-2 | Test Case Generation | USN-5 | As a user, I can generate test cases from code using AI | 2 | Medium | Bonthu Sai Chandrika |
| Sprint-2 | |  | | --- | |  |   Code Summarization | USN-6 | |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | As a user, I can receive a summarized explanation of code | |  |  | | --- | |  | | 2 | Medium | Bollina Lavanya |
| Sprint-2 | |  | | --- | | Chat Assistant |  |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | |  | | | USN-7 | As a user, I can interact with a chatbot for SDLC help | 2 | High | Chittareddy Praveen Kuma |
| Sprint-2 | |  | | --- | |  |   Image Upload Feature | USN-8 | |  | | --- | |  |  |  | | --- | | As a user, I can upload screenshots/designs for processing | | 1 | Low | C Anvesh Reddy |
| Sprint-2 | |  | | --- | |  |   Voice Recognition | USN-9 | As a user, I can input queries through voice | 2 | Medium | Chittareddy Praveen Kumar |
| Sprint-2 | |  | | --- | |  |  |  | | --- | | Help/FAQ Section | | USN-10 | |  | | --- | |  |  |  | | --- | | As a user, I can access help section | | 1 | Low | All Members |

**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 | 10 June 2025 | 14 June 2025 | 11 | 14 June 2025 |
| Sprint-2 | 10 | 5 Days | 17 June 2025 | 21 June 2025 | 10 | |  | | --- | |  |  |  | | --- | | 21 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/project-management/estimation**](https://www.atlassian.com/agile/project-management/estimation)

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