**Project Planning Phase**

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

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| --- | --- |
| Date | 15 February 2025 |
| Team ID | LTVIP2025TMID32689 |
| Project Name | smartSDLC-AI-enhanced software develpoment life cycle |
| Maximum Marks | 5 Marks |

# Product Backlog, Sprint Schedule, and Estimation

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| --- | --- | --- | --- | --- | --- |
| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority |
| Sprint-1 | Requirement Analysis and Code Generation | USN-1 | As a user, I can convert unstructured requirements into user stories using NLP. | 3 | High |
| Sprint-1 | Code Generation | USN-2 | As a user, I can generate code from user stories automatically. | 5 | High |
| Sprint-1 | Bug Fixing | USN-3 | As a developer, I can auto-detect and fix bugs in generated code. | 5 | High |
| Sprint-1 | Test Case Generation | USN-4 | As a user, I can automatically generate test cases from the user stories. | 3 | Medium |
| Sprint-2 | Code Summary | USN-5 | As a user, I can generate a summary of the code to make it easier to understand. | 4 | Medium |
| Sprint-2 | Chatbot Integration | USN-6 | As a user, I can get real-time assistance through an AI-powered chatbot for SDLC tasks. | 5 | High |
| Sprint-2 | Deployment and Integration | USN-7 | As a user, I can deploy the SmartSDLC platform to the cloud for use in teams. | 6 | High |

# Project Tracker, Velocity & Burndown Chart

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| --- | --- | --- | --- | --- | --- |
| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) |
| Sprint-1 | 22 | 6 Days | 24 Feb 2025 | 1 Mar 2025 | [To be filled] |
| Sprint-2 | 23 | 6 Days | 2 Mar 2025 | 8 Mar 2025 | [To be filled] |

# Velocity Calculation

For Sprint-1 and Sprint-2, the team's average velocity (AV) per sprint can be calculated. The velocity for each sprint can be calculated by dividing the total story points by the number of sprints. The total story points for both sprints are 45. The average velocity is calculated as: Velocity = 45 / 2 = 22.5 Story Points per Sprint.