# Project Planning Phase

Date: 26 June 2025

Team ID: LTVIP2025TMID34234

Project Name: SmartSDLC: AI-Enhanced SDLC Automation Platform

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

Use the below template to create product backlog and sprint schedule

## Product Backlog & Sprint Schedule

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
| Sprint-1 | App Initialization | USN-1 | Set up Streamlit app and virtual environment | 2 | High | All |
| Sprint-1 | Model Setup | USN-2 | Connect to IBM Watsonx and validate credentials | 2 | High | Lithan, Jai |
| Sprint-2 | Requirement Classifier | USN-3 | Upload PDF and classify into SDLC phases | 3 | High | Mahitha |
| Sprint-2 | AI Code Generator | USN-4 | Enter feature and generate code using Watsonx | 4 | High | Jai |
| Sprint-3 | Bug Fixer Module | USN-5 | Paste code and get AI-suggested bug fixes | 3 | High | Niharika |
| Sprint-3 | Test Case Generator | USN-6 | Generate unit tests from code/functions | 3 | Medium | Mahitha |
| Sprint-4 | Code Summarizer | USN-7 | Summarize and explain uploaded code | 2 | Medium | Lithan |
| Sprint-4 | Chatbot Integration | USN-8 | Add floating chatbot for SDLC support | 4 | High | Jai |
| Sprint-5 | UI Enhancements | USN-9 | Improve UI layout and feedback prompts | 2 | Medium | All |
| Sprint-5 | Deployment | USN-10 | Deploy app to Streamlit Cloud | 3 | High | Jai |

## Project Tracker, Velocity & Burndown Chart (4 Marks)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sprint | Total Story Points | Sprint Start Date | Sprint End Date | Story Points Completed | Sprint Release Date |
| Sprint-1 | 4 | 01 July 2025 | 06 July 2025 | 4 | 06 July 2025 |
| Sprint-2 | 7 | 07 July 2025 | 12 July 2025 | 7 | 12 July 2025 |
| Sprint-3 | 6 | 13 July 2025 | 18 July 2025 | 5 | 18 July 2025 |
| Sprint-4 | 6 | 19 July 2025 | 24 July 2025 | 5 | 24 July 2025 |
| Sprint-5 | 5 | 25 July 2025 | 30 July 2025 | 4 | 30 July 2025 |

### Velocity:

Average Velocity = (4 + 7 + 5 + 5 + 4) / 5 = 5 story points per sprint