

Project Planning Phase

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

Date	26 June 2025
Team ID	LTVIP2025TMID38248
Project Name	SmartSDLC - AI-Enhanced Software Development Lifecycle
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation:

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 file to the "Requirements" tab, so that the system can analyze its content.	3	High	Karnam Madhuri
Sprint-1		USN-2	As a user, I can see requirements classified into SDLC phases (e.g., Requirements, Design), so that I can easily understand their category.	5	High	Nagamani Pinniboina
Sprint-2	Code Generation	USN-3	As a user, I can input a natural language prompt for code generation, so that the AI can generate Python code.	5	High	Inkollu Sushma Meghana
Sprint-2		USN-4	As a user, I can see the generated Python code clearly formatted, so that I can copy and use it.	3	High	Karnam Madhuri
Sprint-3	Bug Fixing & Summarization	USN-5	As a user, I can input a buggy Python code snippet, so that the AI can suggest fixes.	5	Medium	Karnam Madhuri
Sprint-3		USN-6	As a user, I can input a code snippet for summarization, so that I can understand its purpose.	3	Medium	Nagamani Pinniboina
Sprint-4	Testing & Chatbot	USN-7	As a user, I can generate test cases for a given code/requirement, so that I can ensure proper testing.	5	Medium	Inkollu Sushma Meghana
Sprint-4		USN-8	As a user, I can interact with a floating chatbot, so that I can get immediate answers to SDLC questions.	3	High	Karnam Madhuri

Project Tracker, Velocity & Burndown Chart:

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	8	5 Days	5 June 2025	9 June 2025	8	9 June 2025
Sprint-2	8	5 Days	10 June 2025	14 June 2025	8	14 June 2025
Sprint-3	8	5 Days	15 June 2025	19 June 2025	8	19 June 2025
Sprint-4	8	5 Days	20 June 2025	24 June 2025	8	24 June 2025

Velocity:

Velocity measures the amount of work a team can complete in a single sprint. Imagine we have a 5-day sprint duration, and the target velocity of the team is 7-8 points per sprint. Let's calculate the team's average velocity (AV) per iteration unit (story points per day), assuming a 8-point sprint:

$AV = \text{Total Story Points(Planned)} / \text{Sprint Duration(Days)} = 8/5 = 1.6 \text{ points per day.}$

Burndown Chart:

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burndown charts can be applied to any project containing measurable progress over time.



