

Project Planning Document – SmartSDLC

Date: 26 June 2025

Team ID: LTVIP2025TMID32004

Project Name: SmartSDLC: AI-Enhanced Software Development Lifecycle

Product Backlog, Sprint Schedule, and Estimation

Sprint	Epic	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Project Initialization	USN-1	Set up Streamlit environment and base application structure	2	High	All
Sprint-1	Watsonx Model Integration	USN-2	Integrate IBM Watsonx Granite Model and test API response	2	High	Sandeep, Prudhvi, Vallika
Sprint-2	Requirements Classification	USN-3	Upload PDF and classify into SDLC phases + user stories	3	High	Sandeep, Bharath, Prudhvi
Sprint-2	Code Generation Module	USN-4	Generate code from prompt using LLM	4	High	Sandeep, Prudhvi, Vallika
Sprint-3	Bug Fixer + Test Generator	USN-5	Fix buggy code and auto-generate test cases	5	High	Sandeep, Bharath, Prudhvi
Sprint-3	Code Summarization	USN-6	Summarize code with explanation + use-case	3	Medium	Vallika, Prudhvi, Sandeep

Sprint-4	Chat Assistant	USN-7	Build conversational assistant for SDLC support	3	Medium	Sandeep, Prudhvi, Vallika
Sprint-4	UI Enhancement + Deployment	USN-8	Polish UI and deploy final application on Streamlit Cloud or VM	4	High	All

Project Tracker, Velocity & Burndown Chart

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	8	13 July 2025	18 July 2025	7	18 July 2025
Sprint-4	7	19 July 2025	24 July 2025	6	24 July 2025

Average Velocity = $(4 + 7 + 7 + 6) / 4 = 6$ story points per sprint

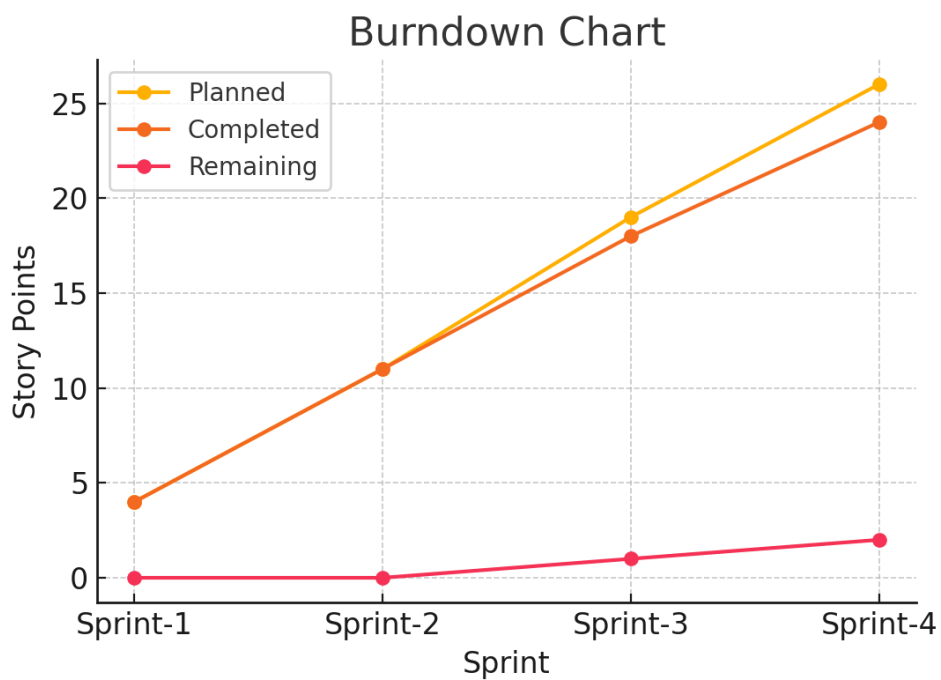


Figure: Sprint-wise Burndown Chart