

Project Design Phase-II

Data Flow Diagram & User Stories

Date	31 January 2025
Team ID	LTVIP2025TMID36326
Project Name	Smart SDLC AI Assistant
Maximum Marks	4 Marks

1 Data Flow Diagrams

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example: Simplified DFD for Smart SDLC AI Assistant showing user input, AI processing, and output generation.

Example: DFD Level 0 (Industry Standard) for SDLC automation processes.

2 User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Pr
Developer (Web user)	Requirement Analysis	USN-1	As a developer, I can input plain English requirements to get structured modules	Structured modules are generated accurately	Hi
		USN-2	As a developer, I can review analyzed requirements for completeness	Requirements report is clear and editable	M
	Code Generation	USN-3	As a developer, I can request code in Python, Java, or C++ from text input	Code is generated in the chosen language	Hi
		USN-4	As a developer, I can edit generated code directly in the UI	Edits are saved and executable	M
Developer (Web user)	Test Case Generation	USN-5	As a developer, I can generate test cases from input code	Test cases cover key scenarios	Hi
Developer (Web user)	Bug Detection	USN-6	As a developer, I can detect and fix code errors with AI suggestions	Errors are highlighted with fix options	Hi
Developer (Web user)	Code Summarization	USN-7	As a developer, I can get a summary of my code's functionality	Summary is concise and accurate	M
Developer (Web user)	Chatbot Assistance	USN-8	As a developer, I can ask SDLC-related questions via chatbot	Responses are accurate and helpful	Lo