

Idea on Phase

Define the Problem Statements

Date	03 August 2025
Team ID	LTVIP2025TMID59168
Project Name	smartSDLC – AI-Enhanced Software Development Lifecycle
Maximum Marks	2 Marks

Customer Problem Statement Template

1. Customer Persona:

Describe the type of problem user facing

Example: Software developers, project managers, and students in software engineering.

2. Problem Description:

what is user struggling with?

Example: Users find it time-consuming and challenging to go from vague requirements to working software quickly. They often write unclear requirements, manually fix bugs, or struggle with starter code generation.

3. Impact of the Problem?

how does it effect user productivity

Example: This leads to slower development cycles, unclear communication, frequent rework, and poor quality of deliverables.

4. Current Alternatives:

what are users doing to solve problem?

Example: Using isolated tools like requirement templates, manual bug fixers, or Stack Overflow for code snippets — none of which are integrated or AI-powered.

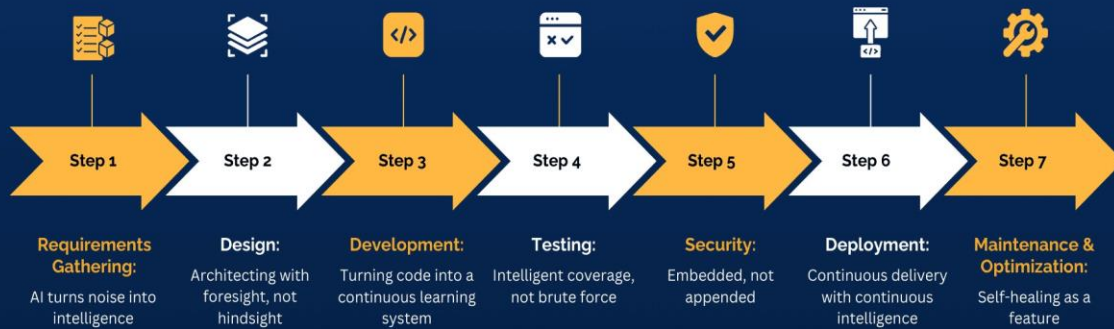
5. Why is Solving This Important Now?

Explain what is cause?

Example: With increasing demand for faster product delivery and smarter tools, AI-powered SDLC tools are critical for efficient and intelligent development.

Reference Link: <https://miro.com/templates/customer-problem-statement/>

How AI is Transforming the Software Development Lifecycle (SDLC)



Example Problem Statement for SmartSDLC

Customer Problem Statement:

"Software developers and students face difficulty converting software requirements into clear classifications, fixing bugs intelligently, and generating relevant starter code. These repetitive, manual tasks increase development time and reduce productivity. Currently, they rely on unstructured approaches and multiple platforms, resulting in inefficiencies. There is a growing need for an integrated, AI-enhanced SDLC tool like SmartSDLC to streamline these core activities and empower users to focus on innovation rather than repetitive tasks."