

Ideation Phase

Define the Problem Statements

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID59952 |
| Project Name | SmartSDLC – AI-Enhanced Software Development Lifecycle |
| Maximum Marks | 2 Marks |

Customer Problem Statement Template:

To understand the customer's point of view, it's essential to define a clear problem statement that highlights the real challenges faced during the traditional Software Development Lifecycle (SDLC). Project managers and developers often struggle with inefficient workflows, manual processes, lack of intelligent tools, and poor visibility across stages of development. These issues lead to delays, reduced productivity, and compromised software quality. By identifying these pain points, the SmartSDLC project aims to create AI-powered solutions that automate repetitive tasks, provide real-time insights, and enhance overall coordination. A well-articulated customer problem statement helps teams stay focused on what truly matters to users, allowing them to build intelligent, responsive experiences that improve the efficiency and success of software projects.

| | | |
|----------------------------|---|---|
| I am | Describe customer with 3-4 key characteristics - <i>who are they?</i> | Describe the customer and their attributes here |
| I'm trying to | List their outcome or "job" the care about - <i>what are they trying to achieve?</i> | List the thing they are trying to achieve here |
| but | Describe what problems or barriers stand in the way - <i>what bothers them most?</i> | Describe the problems or barriers that get in the way here |
| because | Enter the "root cause" of why the problem or barrier exists - <i>what needs to be solved?</i> | Describe the reason the problems or barriers exist |
| which makes me feel | Describe the emotions from the customer's point of view - <i>how does it impact them emotionally?</i> | Describe the emotions the result from experiencing the problems or barriers |

Example:



| Problem Statement (PS) | I am (Customer) | I'm trying to | But | Because | Which makes me feel |
|------------------------|---|--|---|---|--|
| PS-1 | a project manager responsible for overseeing multiple software development projects across various teams. | ensure that each stage of the Software Development Lifecycle (SDLC)-from planning to deployment is efficient, well-coordinated, and completed on time. | I face constant challenges due to lack of automation, scattered tools, inconsistent reporting, and manual tracking of tasks and progress. | traditional SDLC processes rely heavily on human input and disconnected systems, making it difficult to maintain real-time visibility and control over the entire workflow. | stressed, overwhelmed, and concerned about delays, cost overruns, and missed quality benchmarks. |
| PS-2 | a software developer working on tight sprint cycles with high expectations for productivity and code quality. | deliver well-tested, maintainable code quickly, while keeping up with dynamic changes in requirements. | I spend excessive time on repetitive coding tasks, manual debugging, and understanding unclear or outdated documentation. | my development environment lacks AI-powered tools that could assist with code generation, testing, and intelligent recommendations. | frustrated, inefficient, and under continuous pressure to meet deadlines without compromising quality. |