IdeationPhase Define the Problem Statements

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Team ID	LTVIP2025TMID59527
Project Name	Smart SDLC- AI Enhanced Software Develpement LifeCycle
Maximum Marks	2Marks

Problem Statement

In modern software development, teams are often overwhelmed by disjointed tools, unclear requirements, repetitive code writing, and manual testing procedures. This fragmentation leads to inefficiencies, miscommunication, and increased development time. Despite the adoption of agile methodologies and DevOps pipelines, a significant gap remains between business requirement understanding and executable software artifacts.

Core Problem:

There is a lack of an intelligent, centralized system that can assist software teams throughout the Software Development Life Cycle (SDLC)—from requirements analysis to coding, testing, and documentation—while aligning with enterprise standards and maintaining a developer-friendly experience.

l am	a software developer, business analyst, or QA engineer working in a fast-paced, enterprise-grade development team.
I'm Trying To	quickly turn business requirements into production-ready code, aligned with best practices and without wasting time on repetitive tasks.
But	I spend hours manually extracting requirements, writing boilerplate code, and creating test cases from scratch—often switching between tools and missing key details.
Because	there is no unified, intelligent platform that can handle the full SDLC process (requirements \rightarrow code \rightarrow tests \rightarrow documentation) securely and efficiently in one place.
What Makes Me Feal	frustrated, overworked, and worried that the final software will lack quality, speed, or stakeholder alignment.

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

Problem Statement	l am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Enterprise Developer	Build quality code	Too many tools	No unified system	Frustrated & overloaded
PS-2	Agile Team Analyst	Extract requirements	Docs are unstructured	Lack of Al parsing	Confused & inefficient