

Project Design Phase
Problem – Solution Fit Template

Date	27 June 2025
Team ID	LTVIP2025TMID59202
Project Name	SmartSDLC – AI-Enhanced Software Development Lifecycle
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The SmartSDLC framework addresses the inefficiencies of traditional Software Development Lifecycles when applied to AI and machine learning projects. Conventional SDLC models are not optimized for iterative data workflows, frequent model tuning, or continuous deployment. SmartSDLC introduces automation, intelligence, and agility at each phase—data collection, preprocessing, model building, testing, and deployment—allowing faster feedback, adaptive development, and improved reliability. By integrating MLOps practices with agile sprint planning, it ensures efficient use of resources, reduces time-to-market, and aligns better with the evolving needs of modern AI-driven businesses.

Purpose:

- Solve complex ML development issues with a structured and intelligent workflow.
- Increase adoption by aligning with existing agile and DevOps behaviors.
- Sharpen communication between developers, data scientists, and stakeholders.
- Improve delivery speed and product quality with continuous feedback loops.
- Build trust and reliability through real-time testing and monitoring.
- Enhance scalability and flexibility of AI product development.

Template:

WHO IS YOUR CUSTOMER?	EXPLORE LIMITATIONS TO BUY / USE YOUR PRODUCT OR SERVICE	HOW ARE YOU GOING TO BE DIFFERENT THAN COMPETITION?
FOCUS ON FREQUENT, COSTLY OR URGENT PROBLEM TO SOLVE	UNDERSTAND THE CAUSE OF THE PROBLEM	TAP INTO, RESEMBLE OR SUPPORT EXISTING BEHAVIOR
DESIGN TRIGGERS THAT FIT REAL LIFE, SPARK ASSOCIATIONS, MAKE IT FAMILIAR	YOUR "DOWN TO EARTH" SOLUTION GUESS	BE WHERE YOUR CUSTOMERS ARE
ADD EMOTIONS FOR STRONGER MESSAGE	© Daria Nepriakhina / IdeaHackers.nl	

References:

1. <https://www.ideahackers.network/problem-solution-fit-canvas/>
2. <https://aws.amazon.com/blogs/apn/transforming-the-software-development-lifecycle-sdlc-with-generative-ai/>