

Project Design Phase

Problem – Solution Fit Template

Date: 26 June 2025

Team ID: LTVIP2025TMID34234

Project Name: SmartSDLC: AI-Enhanced SDLC Automation Platform

Maximum Marks: 2 Marks

Problem – Solution Fit Template:

The Problem-Solution Fit means aligning a clear customer problem with an effective solution. SmartSDLC solves developer and project team pain points by automating SDLC stages using AI, improving efficiency, accuracy, and developer satisfaction.

Purpose:

SmartSDLC is built to eliminate manual inefficiencies and bottlenecks in software development by automating requirement classification, code generation, testing, debugging, and summarization using IBM Watsonx and LLMs. It caters to developers, testers, and managers who struggle with repetitive, low-level tasks and slow project turnaround.

- Solve repetitive development challenges using cognitive automation.
- Improve adoption by embedding into familiar development workflows via Streamlit.
- Sharpen communication by providing readable, AI-generated documentation.
- Increase velocity by reducing time spent on requirement analysis and testing.
- Build trust by generating reliable outputs using industry-grade LLMs like Granite-13B.

References:

<https://www.ideahackers.network/problem-solution-fit-canvas/>

<https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>