**Project Design Phase**

**Problem – Solution Fit Template**

|  |  |
| --- | --- |
| Date | 26 june 2025 |
| Team ID | LTVIP2025TMID59401 |
| Project Name | SmartSDLC – AI-Enhanced Software Development Lifecycle |
| Maximum Marks | 2 Marks |

**Problem–Solution Fit Template (Customized for Your Project)**

**Problem–Solution Fit means identifying a real, validated problem faced by a specific customer segment and delivering a solution that genuinely addresses it. In the context of your project — an AI chatbot built with IBM Watsonx, FastAPI, and Streamlit — this fit is clearly visible.**

**Purpose (Applied to Your Project)**

**Solve complex problems in a way that fits the state of your customers**

**Your solution targets non-technical users (startups, small businesses, students) who want access to AI capabilities without the complexity of traditional AI integrations. You simplify that process using easy-to-use interfaces and pre-built integration logic.**

**Succeed faster and increase solution adoption by tapping into existing mediums and channels of behavior**

**Your project leverages familiar technologies like Streamlit (for UI), GitHub (for distribution), and IBM Cloud (for backend AI), which your customer segment already explores through tutorials and forums.**

**Sharpen your communication and marketing strategy with the right triggers and messaging**

**By highlighting "Low-cost AI integration", "No ML experience needed", and "Built with IBM Watson", you speak directly to pain points your users face — encouraging faster trust and adoption.**

**Increase touchpoints with your company by finding the right problem-behavior fit**

**Frequent user needs like chatbot automation, query handling, and AI-powered generation are addressed directly. Your caching and secure token handling features eliminate frequent friction points.**

**Understand the existing situation in order to improve it for your target group**

**Your understanding of constraints — like budget, complexity, and lack of clarity — led to a lightweight, open-source solution that directly fills the gap for entry-level users and small teams.**

**Template:**

****