Project Design Phase
Problem – Solution Fit Template

Date	26-June-2025
Team ID	LTVIP2025TMID59533
Project Name	Edututor AI: personalized learning with generative AI and lms integration
Maximum Marks	

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

EduTutor addresses the need for personalized and adaptive learning experiences. Traditional learning platforms do not cater to individual student progress, interests, or knowledge gaps.
With an AI-powered quiz generation engine, EduTutor dynamically creates quizzes based on topic, difficulty, and performance. This ensures learners receive content suited to their needs while educators save time preparing materials.

Problem:

Students and educators face a lack of personalized quiz content. Manually creating adaptive quizzes is time-consuming and often lacks variation, resulting in decreased engagement and limited assessment effectiveness.

Solution:

EduTutor is a Streamlit-based platform that leverages AI (Watsonx), Pinecone (RAG), and FastAPI to generate, evaluate, and manage quizzes.
It provides:
• An interactive frontend using Streamlit (UI, tabs, graphs)
• Backend logic via Python and FastAPI
• AI quiz generation using rule-based logic and foundation models
• Session state via Streamlit's st.session_state
• Secure integration via environment variables (.env)