

Project Design Phase
Problem – Solution Fit Template

Date	27 June 2025
Team ID	LTVIP2025TMID32116
Project Name	EduTutor AI: Personalized Learning with Generative AI and LMS Integration
Maximum Marks	2 Marks

Problem: Students and educators lack personalized, adaptive learning tools and real-time performance insights.

Triggers: Rapid AI adoption in education and demand for data-driven, student-centric systems.

Constraints: Integration with existing LMS like Google Classroom, instant feedback, and privacy compliance.

Solution: EduTutor AI delivers AI-powered adaptive quizzes, diagnostic testing, real-time analytics, and seamless Google Classroom integration.

Problem Solution

1 CUSTOMER SEGMENT(S)

Primary: Students (school/college level) looking for personalized learning experiences

Secondary: Educators seeking real-time insights and adaptive teaching tools

Tertiary: Educational institutions for adopting AI-based personalized learning platforms

2 PROBLEM / JOB TO BE DONE

Students need learning that adapts to their ability and performance in real-time

Educators need instant-actionable performance data to improve instruction

- Existing LMS lack AI-powered adaptive quizzing and real-time academic alignment

3 TRIGGERS (TR)

Lack of personalized learning tools in existing education systems

Increasing adoption of AI-based smart education platforms globally

Google Classroom adoption with demand for better data-driven insights

4 EMOTIONS :BEFORE/AFTER (EM)

Before: Frustration, anxiety over standardized, one-size-fits-all exams

After: Confidence, satisfaction from tailored learning and instant feedback

6 AVAILABLE SOLUTIONS (AS)

Google Forms-based quizzes (manual, non-adaptive),

Static LMS quiz modules (Moodle, Canvas — no AI, no adaptive feedback)

Basic online quiz apps (no classroom integration, no real-time analytics)

7 ROOT CAUSES (RC)

Traditional systems not built for AI or adaptive learning

Lack of integrated data-pipelines between academic tools and LMS

Educators not equipped with real-time analytics dashboards

Over-reliance on one-size-fits-all assessments in mainstream

8 BEHAVIOUR (BE)

Students: Already accustomed to Google Classroom, online quizzes

Educators: Use LMS for quiz management but lack advanced analytics

Both groups value instant, actionable feedback

Institutions prioritize scalable, secure, integrated solutions,

✓ YOUR SOLUTION

EduTutor AI

- ✓ AI-powered adaptive quiz generation using (BM Watsonx and Granite LLM)
- ✓ Diagnostic testing for, personalized learning journeys
- ✓ Google Classroom integration for seamless academic alignment
- ✓ Pinecone-powered vector database for real-time educator analytics

10 YOUR SOLUTION