**Project Design Phase**
**Proposed Solution**

| Date | 26 JUNE 2025 |
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| Team ID | LTVIP2025TMID29388 |
| Project Name | Edu-Tutor AI: Personalized Learning with Generative AI and LMS Integration |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in the proposed solution template.

| S No | Parameter | Description |
|---|---|---|
| 1. | Problem Statement (Problem to be solved) | Traditional Learning Management Systems (LMS) lack personalization, resulting in generic content delivery and disengaged learners. Students often struggle to find relevant materials or suitable tutors, while educators face limitations in adapting content for each individual. There is a growing need for intelligent, AI-driven solutions that enhance personalization, feedback, and learner outcomes. |
| 2. | Idea / Solution description | <ul><li>**Personalized learning pathways** based on performance and behaviour</li><li>**Generative AI-based quizzes and content suggestions**</li><li>**Smart tutor-student matchmaking** based on subjects and availability</li><li>**Live deployment through Flask with Gmail-based secure login**</li><li>**Progress analytics dashboards** for students and tutors</li></ul>The solution is hosted as a web app and supports integration with existing educational platforms for scalability. |
| 3. | Novelty / Uniqueness | Uses **generative AI** to create adaptive educational content on-the-fly. Real-time **recommendation engine** for personalized learning journeys. Combines tutor matching, AI quizzes, and LMS integration in one system. Agile-developed using sprint planning, burndown charts, and story points. Designed for both **students and educators** with targeted features. |

| 4. | Social Impact / Customer Satisfaction | **Empowers students** with relevant, adaptive content<br>**Reduces educational inequality** by offering affordable, AI-powered tutoring<br>**Improves tutor efficiency** by automating routine personalization tasks<br>Increases learner **engagement, confidence, and retention**<br>Supports **schools, coaching centers, and online educators** in scaling personalized learning |
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| 5. | Business Model (Revenue Model) | Edu-Tutor AI follows a **freemium SaaS model**:<br>• **Free tier:** Basic features for learners and tutors<br>• **Premium subscription:** For advanced analytics, content generation, and integration with third-party LMS platforms<br>• **Institutional licensing:** For schools and educational enterprises<br>• Future potential includes **advertising partnerships** with EdTech content providers |
| 6. | Scalability of the Solution | The solution is **modular and cloud-deployable**, allowing:<br>• Easy scaling to thousands of users using containerized services (e.g., Docker + Flask)<br>• Integration with popular LMS systems via APIs<br>• Future mobile app development<br>• Regional language support for wider adoption<br>• Expansion across **K-12, higher education, and professional certification sectors** |