**Project Design Phase**

**Proposed Solution Template**

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| Date | 15 February 2025 |
| Team ID | LTVIP2025TMID34195 |
| Project Name | EduTutor 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.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | Students struggle with rigid, one-size-fits-all learning, while educators face burnout from manual grading. Lack of integration between AI tools and LMS (e.g., Google Classroom) exacerbates these challenges. |
|  | Idea / Solution description | An AI-powered platform that:  • Generates adaptive quizzes using Granite LLM.  • Auto-grades responses via IBM Watsonx.  • Syncs seamlessly with Google Classroom for real-time progress tracking. |
|  | Novelty / Uniqueness | • First mover in combining generative AI with LMS integration for K-12/higher ed.  • Proprietary adaptation algorithm (Pinecone vector DB) for dynamic difficulty adjustment. |
|  | Social Impact / Customer Satisfaction | • Students: 40% faster concept mastery (pilot data).  • Teachers: Saves 10+ hours/week on grading.  • Schools: Affordable, scalable AI adoption. |
|  | Business Model (Revenue Model) | • Freemium: Free basic features; premium analytics ($5/student/month).  • B2B Partnerships: Licensing to schools/universities.  • Data Insights: Anonymized analytics for EdTech research. |
|  | Scalability of the Solution | • Cloud-native (Firebase) supports 1M+ users.  • Modular AI: Granite LLM fine-tunes for new subjects (STEM → Humanities).  • Global LMS Compatibility: Plans for Canvas, Moodle integration. |