**Project Design Phase**

**Proposed Solution Template**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID32013 |
| Project Name | SmartSDLC – AI-Enhanced Software Development Lifecycle |
| 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) | Developers face delays and inefficiencies due to lack of real-time support during the SDLC. Traditional tools don’t provide intelligent, context-aware assistance. |
|  | Idea / Solution description | An AI-enhanced chatbot integrated into the SDLC process that assists developers by answering queries, generating code, writing test cases, and analyzing requirements. |
|  | Novelty / Uniqueness | Combines the power of generative AI with SDLC knowledge to provide instant, phase-specific support—context-aware and customizable for each project stage. |
|  | Social Impact / Customer Satisfaction | Increases development speed, reduces human error, and boosts team collaboration. Customers benefit from faster, higher-quality software delivery. |
|  | Business Model (Revenue Model) | Subscription-based model for organizations with tiered plans (e.g., per developer/month), along with enterprise licensing and API access for integration. |
|  | Scalability of the Solution | Can support individual developers, small teams, or large enterprises. Cloud deployment ensures scalability and multi-user support. |