**Project Design Phase**

**Solution Architecture**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID34066 |
| Project Name | SmartSDLC – AI-Enhanced Software Development Lifecycle |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

Solution architecture for Smart SDLC bridges the gap between developer pain points and AI-driven solutions using IBM Granite LLM. It aims to:

* Identify the most effective generative AI approach for SDLC-related challenges.
* Define the system’s structure, logic, data flow, and integration points with development tools.
* Outline the key features like bug fixing, code generation, requirement transformation, and test case generation.
* Provide a clear roadmap for development phases and functional specifications for efficient delivery.

**Example - Solution Architecture Diagram:**

