Project Design Phase
Proposed Solution Template

Date	27 JUNE 2025
Team ID	LTVIP2025TMID33968
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.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In traditional SDLC environments, developers and project teams spend significant time on non-core tasks like documentation, test creation, and sprint planning. This leads to inefficiencies, inconsistent delivery, and reduced developer productivity. There is a lack of intelligent automation to streamline these repetitive tasks.
2.	Idea / Solution description	Our solution is an AI-powered SDLC enhancement platform that integrates IBM Watsonx GenAI into software development workflows. It generates documentation, sprint plans, and test cases using natural language prompts. It also assists with backlog estimation and automates daily repetitive tasks. The tool integrates with GitHub and project management systems to ensure smooth automation.
3.	Novelty / Uniqueness	Unlike generic tools, our platform provides contextual automation by learning from historical team data and real-time project input. The integration with IBM Watsonx GenAI brings enterprise-level AI accuracy and flexibility. The solution is developer-centric and modular, making it adaptable to various tech stacks.
4.	Social Impact / Customer Satisfaction	Unlike generic tools, our platform provides contextual automation by learning from historical team data and real-time project input. The integration with IBM Watsonx GenAI brings enterprise-level AI accuracy and flexibility. The solution is developer-centric and modular, making it adaptable to various tech stacks.
5.	Business Model (Revenue Model)	The solution can be offered as a SaaS subscription for software development teams, with tiered pricing based on the number of users and integrations (e.g., GitHub, JIRA, Slack). Additional revenue can be generated through

		consulting, customization, and premium analytics add-ons.
6.	Scalability of the Solution	The system is built using modular APIs and scalable cloud infrastructure. It can handle increasing workloads by deploying services independently. IBM Watsonx integration ensures it can be scaled across enterprise-level requirements and multiple development teams with minimal reconfiguration.