Risk	Description	Impact	Mitigation Strategy
Incorrect Task Decomposition	Errors in parsing and converting user input into logical trees/graphs can affect the entire code pipeline.	High	Use heuristics and fallback models to validate tree and DAG formation before proceeding.
User Misunderstanding of Output	Non-technical users may misinterpret generated code or fail to configure the environment correctly.	Medium	Provide well-commented code and generate markdown documentation for setup, usage, and troubleshooting.
Overhead in Debugging Auto-Generated Code	Developers may find it harder to debug code they didn't write.	Medium	Ensure code clarity, modularity, and adherence to standard naming and styling conventions.

TABLE 5: Operational Risks

Risk	Description	Impact	Mitigation Strategy
Scope Creep	As AI capabilities evolve, constant feature additions may shift project focus or delay delivery.	High	Lock core features early and follow iterative milestone-based development.
Team Skill Gaps	Team may lack domain expertise in prompt engineering or LLM optimization.	Medium	Schedule upskilling sessions and adopt prompt frameworks like LangChain to reduce complexity.
API Budget Overruns	Excessive or inefficient API usage could exceed the estimated budget.	Medium	Implement usage tracking, caching, and fallback mechanisms using local models wherever feasible.

TABLE 6: Project Management Risks