

Aptly – AI App Builder Platform (High Level Design)

This document is an enhanced and renamed version of the original Lovable Clone Project.

Product Vision:

Aptly is an AI-powered application builder where users can create full-stack applications by chatting with an AI agent.

Core Components:

- Frontend (Chat UI, Preview, File Explorer)
- API Gateway
- Intelligence Service
- LLM Layer
- Workspace Service
- Vector Store (RAG)
- Storage (MinIO/S3)
- Execution Service (Kubernetes/MicroVM)

Key Features:

- Project Management
- Authentication
- AI Code Generation
- Chat Sessions
- File Operations
- Live Preview & Logs

Payments & Quotas:

- FREE / PRO / TEAM plans
- Token and runtime quotas
- Stripe integration

Observability & Security:

- Tracing, logging, metrics
- Namespace isolation
- Secrets management

Future Enhancements:

- Template marketplace

- One-click deploy
- Voice-based app creation