

PRESENTATION LAYER

PyQt5
Desktop GUI

CLI
Tool

REST API
(FastAPI +
Swagger)

BUSINESS LOGIC LAYER

Core Services

- Request Builder & Executor
- Collections & Environments
- Variable Substitution

- Authentication Manager

Analysis & Intelligence

- Multi-API Analysis Engine
- ML Algorithms (Clustering, Regression,
Scoring, Prediction)
- AI Test Assistant

- Anomaly Detection Engine

Observability Stack

Security & Compliance

- Synthetic Monitoring
- Security Scanner
- Distributed Tracing (W3C)
- Credential Encryption (AES)
- Log Aggregation

- Service Dependency Mapping

- SLA Tracking

- Workflow Monitor

Output & Integration

- Report Generator (PDF/HTML/XLS/JSON)
- Alert Dispatcher (4 channels)

DATA LAYER

SQLAlchemy ORM
MySQL 8.0+ / SQLite 3

File System
(Reports, Logs, Backups)