

RoxanneAI Development Report

Prepared for the Glondia portfolio using the Roxanne project architecture notes, development logs, and platform summary.

RoxanneAI is an AI platform built around generation workflows, secure credit-aware controls, and an intelligent SiteCraft editing environment for live website work. The system combines AI output, project understanding, and deployment-oriented tooling in one modular application stack.

Platform Overview

- Node.js, Express, and EJS application structure with MVC-lite organization.
- Generation support for text, image, voice, and video workflows.
- Credit-based usage controls, token management, and quota-safe failure handling.
- Project-aware website editing through the Roxanne SiteCraft environment.

Key Functions

- Intent orchestration split into extraction, dispatching, parsing, validation, and normalization layers for maintainable AI action routing.
- Protected generation workflows with history trimming, duplicate request protection, and credit deduction logic to prevent misuse.
- SiteCraft AI editor with Monaco multi-model support, virtual file caching, smart preview behavior, and deployment-ready editing flow.
- Deep project indexing and dependency mapping so RoxanneAI can understand site structure and perform intelligent, context-aware edits.

Development Milestones

- Refactored a monolithic intent service into modular service layers for stronger separation of concerns.
- Added token and credit security controls across AI request handling and frontend interactions.
- Optimized model usage and 429 quota handling with fallback behavior and clearer user messaging.
- Integrated SiteCraft AI as a standalone editing experience inside the dashboard.
- Upgraded the editor experience with Monaco multi-model architecture, VFS caching, and dependency-aware preview updates.
- Introduced project intelligence services so the AI can analyze and edit websites using real file relationships.

Project Note

The associated Website button on the Glondia portfolio currently points to the Roxanne project's documented local application URL, which is listed in the source project notes as <http://localhost:4000>.