Runalytix : An Intelligent Code Validator and Optimizer for Automation

Problem :

Runbooks often contain complex Shell, PowerShell, or HTTP scripts prone to syntax and logic errors.

Errors usually appear only during runtime, causing failures and time-consuming debugging.

Inefficient task logic, redundant steps, and poor structuring increase execution time and resource usage.

Manual intervention is often needed to fix broken automation, reducing system reliability.

No real-time, intelligent feedback system exists during Runbook creation.

Developers rely on trial-and-error, which leads to production risks and delays.

Proposed solution:

This project is an AI-powered assistant embedded directly into Calm Runbooks.

It analyzes script quality, logic, and context in real-time.

Detects errors, unsafe patterns, and inefficiencies before execution.

Provides actionable suggestions with clear explanations.

Works seamlessly inside Calm UI no switching context required.

Features:

- **Script Analysis** – Detects syntax, logic, or security issues in scripts.

- **Optimization Suggestions** – Recommends alternatives for inefficient or risky logic.

- **Inline Explanations** – Each suggestion comes with reasoning and impact.

- **Context Awareness** – Understands task type (e.g., VM restart, HTTP call) to give precise help.

- **Two Modes** – Works at both individual task level and whole Runbook level.

Backend Workflow: