

Troubleshooting System

Overview

Design and implement a system that can analyze HTTP Archive (HAR) files and application logs to identify performance issues, errors, and suggest optimizations.

Background

Our application occasionally experiences performance degradation and failures that are difficult to diagnose. We have collected HAR files and logs from both successful and failed sessions. Your task is to create a tool that can systematically analyze these files to identify patterns and suggest improvements.

Requirements

Core Functionality

- Build a system that can parse and analyze HAR files and application logs
- Implement algorithms to detect anomalies and common failure patterns
- Develop a recommendation engine that suggests potential fixes for identified issues
- Create a simple interface (CLI or web-based) to interact with your system

Analysis Requirements

- Detect error patterns across failed sessions
- Compare successful vs. failed sessions to highlight differences
- Generate actionable recommendations based on findings

Technical Specifications

- You may use any programming language and frameworks of your choice
- Include a README with setup instructions and explanation of your approach
- Provide documentation for your analysis algorithms and recommendation logic
- Include unit tests for core components

Deliverables

- Source code for your analysis system
- Documentation of your approach and architecture decisions
- A sample analysis report from running your system on the provided files
- Suggestions for architectural improvements based on your findings

Evaluation Criteria

- Code quality, organization and clarity
- Analysis algorithm effectiveness
- Recommendation quality and actionability
- Creative problem-solving

Provided Resources

▼ Task 1 ❌

1.har

1.log

▼ Task 2 ✅

2.har

2.log

▼ Task 3 ✅

3.har

3.log

▼ Task 4 ✅

4.har

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Time Expectation

We expect this assignment to take approximately 4-6 hours. Please focus on demonstrating your approach rather than creating a perfect solution.