GRCResponder: AI-Driven Optimization of General Rate Cases

Brianna Steier, Liam Gass, Elijah Tavares, Cael Howard, June Kim, Rish Sharma, Angel Li

accenture

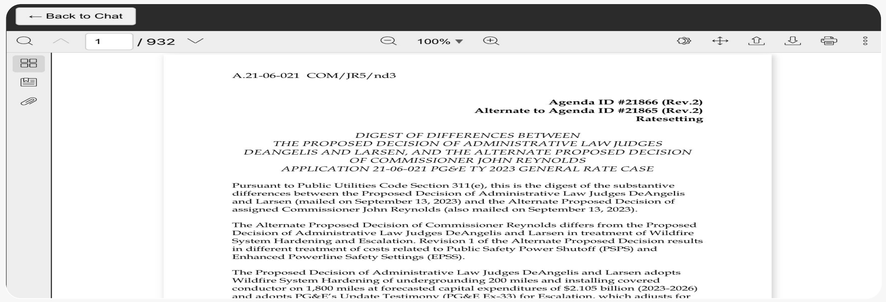
The Problem

Utility companies regularly undergo General Rate Case (GRC) proceedings with the California Public Utilities Commission (CPUC) to justify the rates they charge their customers. GRC teams must manually sift through thousands of pages of documents to craft responses, which is tedious, repetitive, and inefficient.

Our Approach

The GRCResponder is an A.I. chatbot that leverages modern semantic search technology to revolutionize this process. Using vector database embeddings, we can retrieve the most relevant documents to address user queries and generate responses to regulatory inquiries.

User Interaction & Design



Project Goals

Streamline Legal Preparation

- Reduce workload for target users by automating document retrieval

Improve Document Search Efficiency

- Quick retrieval of relevant filings and rulings from large collection of stored documents

Ensure Consistent Response Output

- Generate standardized and uniform answers to regulatory inquiries across all submissions

Challenges

Document Ingestion

- Navigating the CPUC Website & processing data from thousands of proceedings

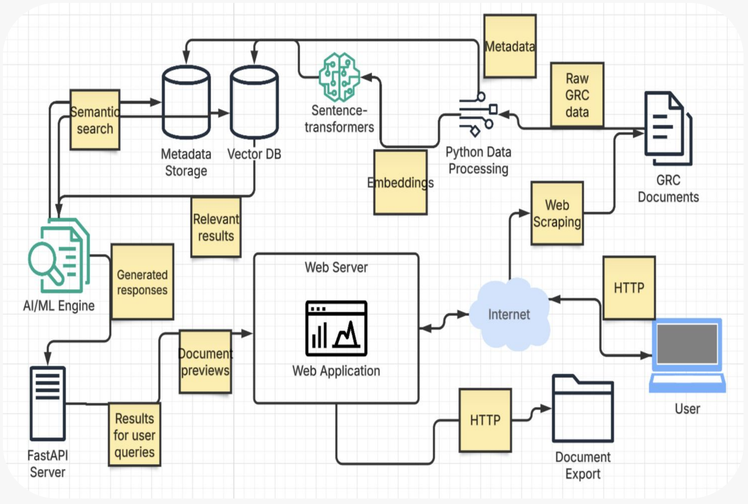
Search Optimization

- Narrowing relevant search results combining semantic and structured filtering

Software Tools

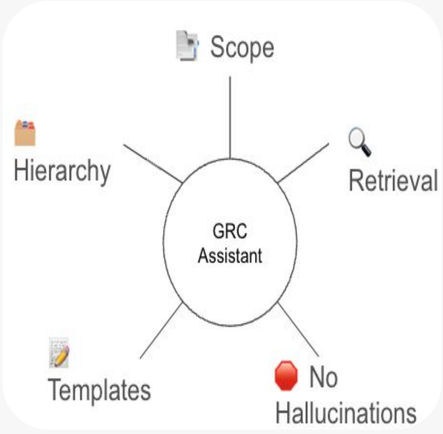
FastAPI · Qdrant · chroma · VAGRANT · React · Gemini · PostgreSQL · Azure

System Architecture

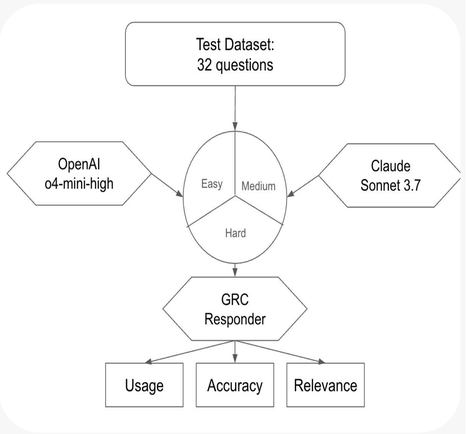


Innovation

1: Prompt Engineering



2: LLM-as-a-Judge Evaluation



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