GRCResponder

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Web Changes

+ Chat box displays multiple lines
+ Longer queries work better
+ Created a setup.sh for installing dependencies (psql, frontend, backend)
+ Created a run.sh to run the backend and frontend server

Vector DB Files

Vector DB Setup

+ Added ReadMe for general set-up and a ReadMe in /grc_tools/ for setting up the vector database
+ Email with more details of pricing + setup details sent

Key Points

+ Monthly cost of database will be approximately: **$82.26**
  + Currently have $11.52 in account
+ To avoid idle costs, we can temporarily disable the VM instance and only pay for storage

Documents

Research Paper
- + Mostly complete
  - + pending section 6
- + Please review

GRCResponder: AI-Driven Optimization of General Rate Cases

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The Problem

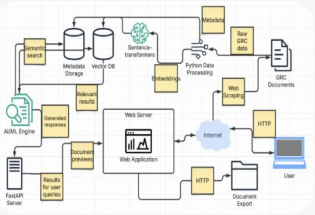
Utility companies regularly undergo General Rate Case (GRC) proceedings with the California Public Utilities Commission (CPUC) to justify the rates they charge their customers. GRC teams must manually sift through thousands of pages of documents to craft responses, which is tedious, repetitive, and inefficient.

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

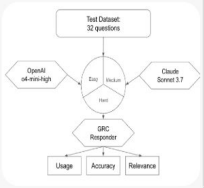
System Architecture



Innovation

1: Prompt Engineering

2: LLM-as-a-Judge Evaluation



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 · VACUANT · React · Gemini · PostgreSQL · A

We would like to acknowledge the Accenture team of Shawna Tuli, Vish Chokshi, Mo Nomeli, Marty Hodgett, Cheryl Linder and Manish Dasuar for their guidance and ideas.

Questions?