Photo by Pexels

Insurance Documents RAG QA Chatbot

Bridging the Gap Between Users and Policies

Table of Contents

01 About the Project

02 Key Features

03 Tech Stack

04 Challenges Addressed

05 Future Scope

06 Conclusion

1

About the Project

Intelligent Query Answering

- The Insurance Documents RAG QA Chatbot simplifies complex insurance policies by integrating retrieval and generation techniques, providing accurate answers in real time.
- Employs a Retrieval-Augmented Generation (RAG) pipeline for highly relevant answers.
- Combines LlamaIndex retrieval with OpenAI GPT-4o-mini/GPT-4o for user-centric response generation.
- Seamlessly retrieves relevant information and generates concise answers.


Photo by Pexels

2

Key Features

Innovative Solutions

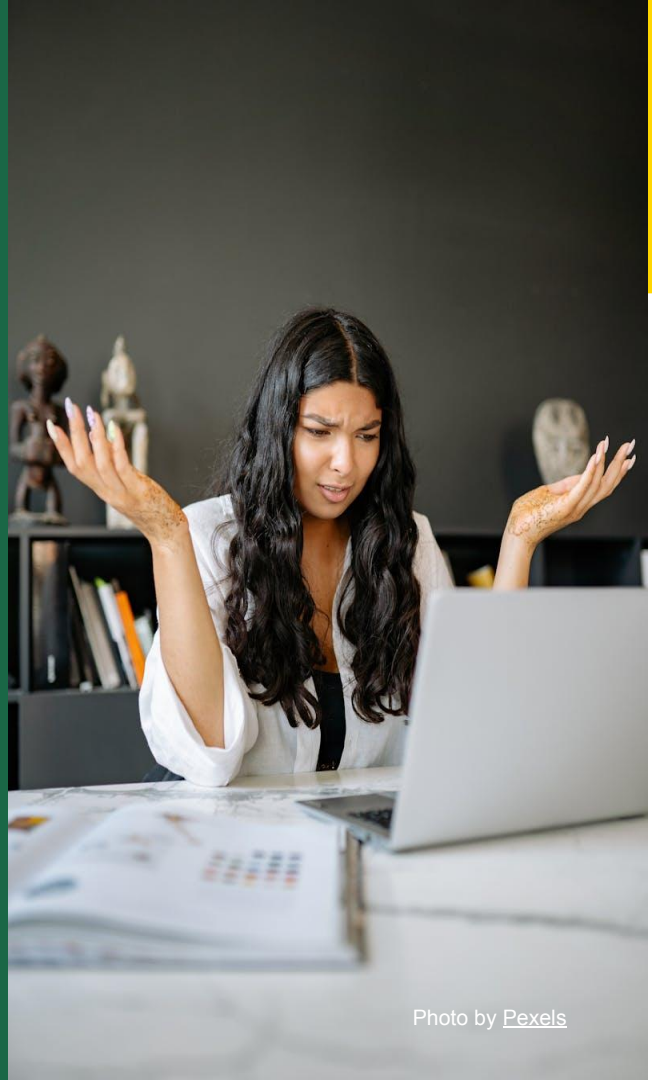
- Precise Responses: Uses RAG pipeline for relevance.
- Efficient Embedding: Utilizes ChromaDB for storage.
- AI-Driven Answers: Combines LlamaIndex with AI models.
- Dynamic Processing: Splits documents for retrieval.

Photo by Pexels

Tech Stack

Powerful Technologies

- Language: Python.
- Frameworks/Libraries: LlamaIndex, ChromaDB, DiskCache.
- APIs/Models: OpenAI's Embedding Model, GPT-4o, LlamaIndex.
- Cutting-edge technologies for robust performance.



Challenges Addressed

Overcoming Hurdles

- Optimized PDF Parsing: Enhanced extraction using Llamaindex.
- Embedding Efficiency: Added cache for redundant embeddings.
- Query Optimization: Integrated cache for efficiency.
- Enhanced Passage Ranking: Introduction of reranker.

Future Scope

Expanding Horizons

- Multi-lingual Support: Extend processing capabilities.
- Generative Models: Integrate Claude AI for responses.
- Innovative advancements for broader functionality.
- Enhancing capabilities for diverse user needs.

Photo by Pexels

Conclusion

Ensuring Precision

- Bridging the Gap: Delivers precise, contextual responses.
- Robust Caching: Efficient embeddings and querying.
- Seamless Experience: For policyholders and professionals.
- Enabling understanding of complex insurance policies.