

GraphRAG Assistant – Sample Document

Introduction

This document is created to test an end-to-end Retrieval Augmented Generation (RAG) application using open-source technologies such as LangGraph, OpenSearch, and local Large Language Models (LLMs). The system is designed to answer user questions based only on the content stored in the document repository.

Business Overview

The organization described in this document operates in the technology consulting domain. It provides services such as data analytics, machine learning model development, cloud migration, and AI-powered automation solutions. The company primarily serves clients from the finance, healthcare, and e-commerce sectors.

Revenue Model

The company generates revenue through multiple channels: 1. Fixed-price project contracts 2. Monthly subscription-based analytics services 3. Pay-per-use API integrations 4. Long-term enterprise consulting agreements

Technology Stack

The internal technology stack includes Python, FastAPI, OpenSearch for vector storage, LangGraph for agent orchestration, and open-source LLMs such as LLaMA running via Ollama. Sentence-transformers are used for embedding generation.

Security and Compliance

All customer data is processed securely. Access control, audit logging, and encryption are implemented to comply with industry standards. The system does not send data to external cloud-based LLM providers, ensuring data privacy.

Conclusion

This document serves as a reference for validating document ingestion, semantic search, context retrieval, memory handling, and token management within the GraphRAG Assistant application.