

Agentic RAG System

Objective

Build an Agentic RAG System that uses AI agents to intelligently retrieve and answer questions from documents.

Requirements

Your AI agent-powered system must:

1. Ingest data from the specified data sources
 2. Store information in a vector database
 3. Use agentic workflows to answer user queries
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1. Agentic Workflow

- Demonstrate agentic behaviour in query processing
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2. RAG Implementation

- Use any Vector Database
 - Data Engineering is critical - show your thinking on data processing
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3. LLM Integration

- Use any LLM of your choice
 - Free APIs are acceptable (e.g., Google Gemini)
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4. Data Source

System should support the following:

- Documents (PDF, DOCX, PPT)
 - Excel
 - Text File
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Bonus Points

- **Milvus** as vector database
 - Advanced retrieval techniques
 - Clean UI
 - Comprehensive error handling
 - **Self-Hosted LLM** with any framework like Ollama or vLLM
 - **MCP (Model Context Protocol) Servers** - Build or use MCP servers
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Submissions

1. GitHub Repository (Public)

Must include:

- Complete working code
 - README with setup instructions
 - Sample data (if applicable)
 - Requirements file
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2. System Design Document (PDF)

Must explain:

- System architecture diagram
 - Agentic workflow design
 - Context construction strategy
 - Technology choices and rationale
 - Key design decisions
 - Limitations
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3. Video Recording (~3 minutes)

Must demonstrate:

- System flow and functionality
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Submission Instructions

Submit the following through email:

- GitHub repository URL
- Video recording link
- System Design Document (PDF)

Good luck! Show us how you think about building intelligent AI systems.