SysBuddy – AI Chatbot for System Management

AI Champions Bootcamp 2025 Run 2
About Us

Project Scope & Objectives

- Develop a POC prototype for a web-based RAG chatbot that is capable of:
    a) Uploading project-specific documents (supports document ingestion for project-specific materials) ; and
    b) Indexing information from URLs (indexes content from both internal and external URLs)

- RAG chatbot acts as a "second system manager" which holds relevant information and knowledge about the project (acts as a virtual assistant to support project knowledge management and decision-making)

- RAG chatbot is built with Python, Streamlit, and LangChain with the project codes stored in Github (link) and app hosted on Streamlit Community Cloud

Data Sources & Details

S/N	Data Type	Data Sources & Details
1	Documents	a) Envisioned end state will be to sync project documents from team folders (i.e. Sharepoint) b) E.g. Contract documents, monthly reports, payment minutes
2	URL	Envisioned end state will for the app to be able to crawl through and index both internet and intranet URL sites

Notes:
a) Due to sensitive project documents, only mock data and documents are uploaded for the chatbot's knowledge base
b) Sensitive credentials (i.e. LLM API keys and app password) are stored securely using Streamlit Community Cloud's built-in Secret Management tool

Features

- <u>Current POC Features</u>
    - Basic password protection for access control
    - Option to choose between OpenAI or Deepseek LLM
    - Ability to create a single knowledge base by uploading PDF documents and/or indexing URL links (using VectorRAG approach)
    - Respond to user chats and queries related to the project.

- <u>Future Roadmap</u>
    - <u>Scalability</u>: Manage multiple knowledge bases
    - <u>Automation</u>: Sync from team folders (e.g. SharePoint) to enable automatic knowledge base updates
    - <u>Security</u>: Advanced account management features
    - <u>Innovation</u>: Add and compare GraphRAG approach