Mid-Term & Final Details:

In depth case study analysis of a RAG application

Start Assignment

* **Due** Jul 12 by 11:59pm
* **Points** 100
* **Submitting** a file upload

**This is a group assignment**

**Objective:**

To evaluate your ability to understand and implement an open-source RAG application for document summary. With this project, you will understand the practical usage of GenAI applications in every possible corporation and industry.

**Assignment Details:**

1. **Select a Case Study**: It is open source Github repo[https://github.com/weaviate/Verba. Links to an external site.](https://github.com/weaviate/Verba)
2. **Install the application:** Install the repo locally on your machine.
   1. Create a new directory "**repos**" and install the application under this directory.
3. There are three ways to install.  For midterm use docker.
   1. Using python environment
   2. Using Docker
   3. Build from sourc
4. **Analyze the GenAI Application**:
   1. **Description**: Provide a detailed description about the GenAI application.
   2. **Installations and Configurations**:
      * Provide list of all prerequisites such as software like git, python, docker, Llama etc.
      * Provide the installation steps for each software and packages.
      * Provide about API keys, subscription details etc.
      * Provide all the configurations
        + system level - Environment variables
        + Scripts - yml, .env, etc.
        + Application level
5. **Demo**: Provide a details demos
   1. run the dockerized application
   2. open the application on the local machine (ex: [https://localhost:8000Links to an external site.](https://localhost:8000/) )
   3. Show the configurations with in the application
   4. Upload various types of documents (text files, pdfs, word etc.)
   5. Ask relevant questions
   6. Explain the results
6. **Future Directions**:  ( will provide more detail later for the final exam)
   1. Use the same Gen AI application for the final exam:
   2. Explain the application Architecture
   3. Explain the application stack
7. **Presentation**:
   1. Each group have to present their own presentations
   2. Class presentation for 15-minute followed by Q & A
   3. Use visual aids (slides, charts, videos) to enhance your presentation

**Submission Requirements:**

* Written report (10- pages MAX) .
* Presentation slides (PowerPoint or PDF).
* Demo - Class room