CodeCraft: Unleashing Langchain & LLMs

Assignment 2

Part 1: Short Answers: (Markdown cells of Jupyter Notebook)

1. What are chunks in text splitting? Give examples.
2. What are text embeddings? Give examples.
3. What are vectors? Give examples and name 2 vectorstores.
4. What are the different retrieval techniques used for vectorstrores? Explain 1 sentence about each.

Part 2: Coding Section: (Code Cells of Jupyter Notebook)

QUESTION: Create a langchain agent that can ingest a PDF Research Paper document, and answer these questions –

a. What is the conclusion of this paper?
b. What are the "themes and codes" of this paper?
c. What is the future scope of this paper?

(Hint*) – Use indexing, and store embeddings in a vectorstore and use retrieval techniques to answer questions

Submission:

1. Submit a single Jupyter notebook **(Naming format - <First Name_SRN>.ipynb)** consisting of both parts of the section (Short Answers & Coding Section)

2. Submit a Zip Folder -take output screenshots with the question , **naming convention - question_subquestion.png(example: part2_a.png)** for each screenshot, zip this folder **(Naming format - <First Name_SRN>.zip)**

3. <u>**Submission Deadline : 1st April, 2024 (23:59)**</u>