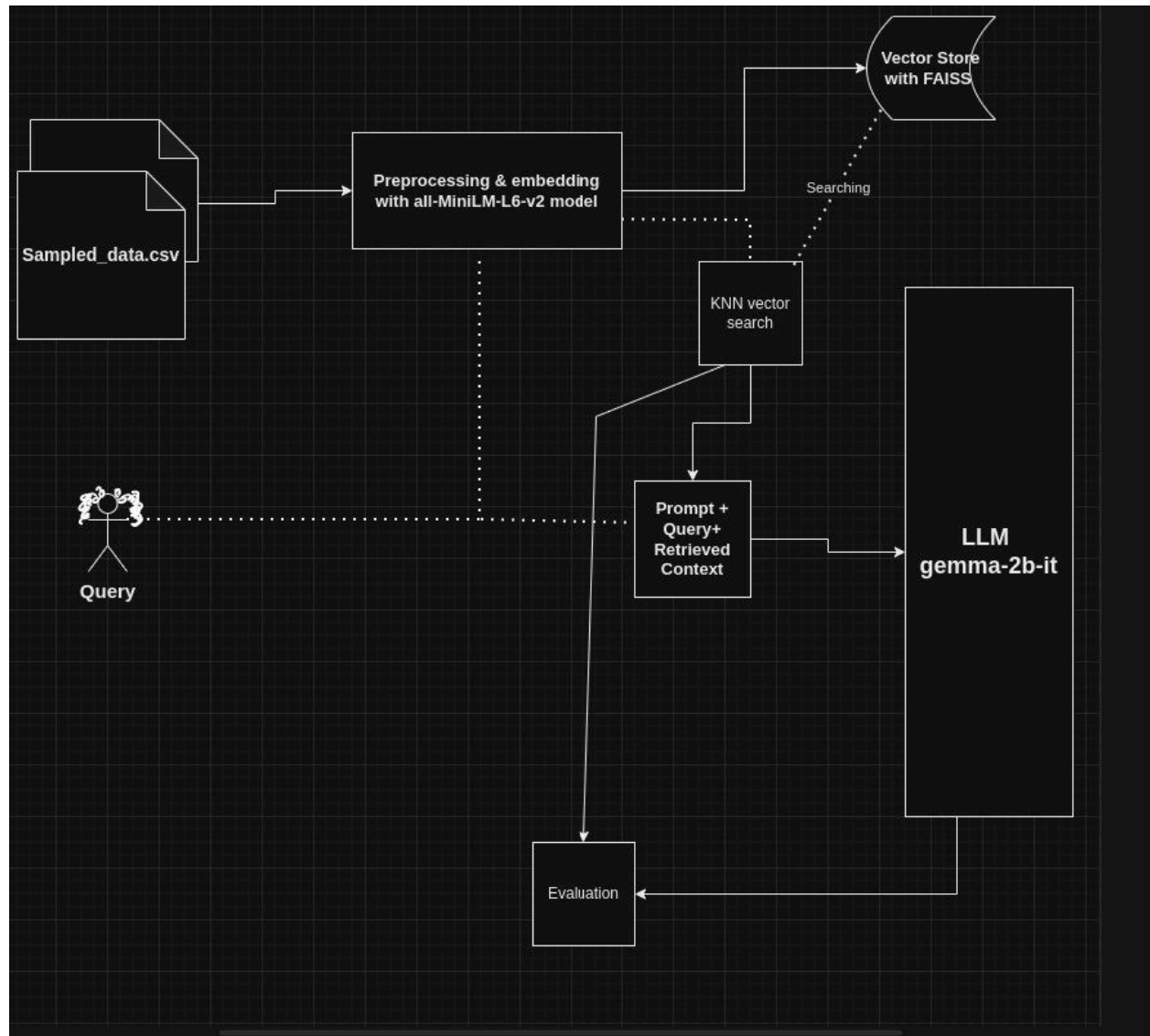


Implementing RAG to Generate Career Advice & Recommendations



The Script:

consists of a class `RAG_Implementation()` which in turn consists of the following methods;

- `data_preparation()` : reads, preprocesses, and embeds the data
- `Retrieval_componenet()`: makes the store vectors
- `Vector_search()`; takes the user job embeds it, search for the k nearest jobs, retrieve them back
- `generation_component()`: generates the output based on the context, prompt, and query.
- `evaluation()`: calculates ROUGE, BLEU, and BERTscores

The notebook contains the same without the class structure, moreover it contains multiple outputs I have generated before and their associated scores.

The prompt cell contains comments where I mentioned other prompts that generated good responses

What to Improve?

- The output can be further improved by changing the prompt a bit, or/and by increasing k, yet my already-limited resources for some reason became even more limited later.
- A post-processing module is needed.
- Fine-tuning the model
- The scores needs improvement and are done between the context, and the response, the prompt-query-context combinations needs to be taken onto account