HibretOne

Resources Recommendation Engine

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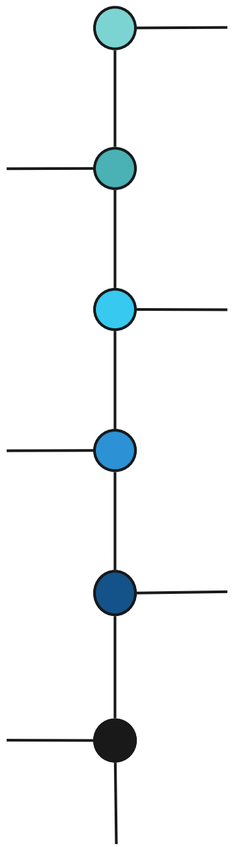
Under Guidance : Drew Currie

Get Started

www.reallygreatsite.com

TASK PLANNING CYCLE



Stage 1

Project Planning

Stage 2

Data Collection and Database Design

Stage 3

Web Development and Indexing

Stage 4

Query Processing

Stage 5

Integration with LLM and NLP

Stage 6

Presentation and User Experience

Stage 1

Project Planning

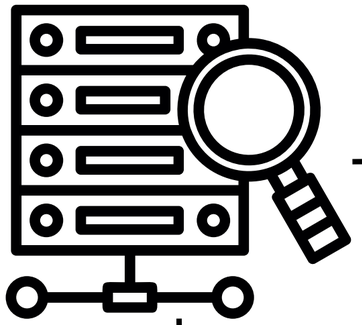
- **Scope**: Entrepreneur founders struggle to find the right resources, support, or business connections when they need them. Mostly this is due to a fragmented support ecosystem & and them not having the social capital within that ecosystem.
- **Goal:** We will create an app where the user enters what they are seeking in the search bar. Using information the user has entered when registering, AI is used to find the most appropriate resource for their request.

Architecture

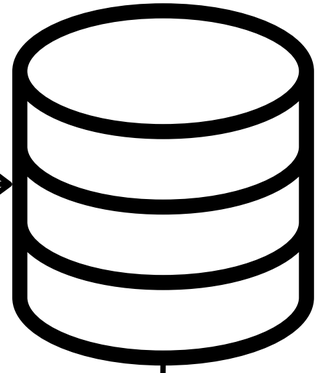
Text Splitter

ELastic Search

Query
Text



Embeding
Generator



Vector DB

LLM /Open AI Sentence
Transformers

Query +
Context

QnA Model

Stage 2

Data Collection and Database Design

Data Collection is mainly done through these sites:

- https://altar.io/top-startup-incubators-accelerators-uk/
- https://www.gov.uk/business-finance-support/enterprise-programme-for-young-people-uk

Data Design:

- Created a database schema that organizes and stores the collected data efficiently.
- Use SQL to define the tables, relationships, and indexes.

Stage 3

Web Development and Indexing

- web framework in Python, such as Flask, to develop your search engine website.
- A user interface where users can enter search queries.
- Implement full-text search capabilities, which may involve using a search engine library like Elasticsearch or using SQL's full-text search features.

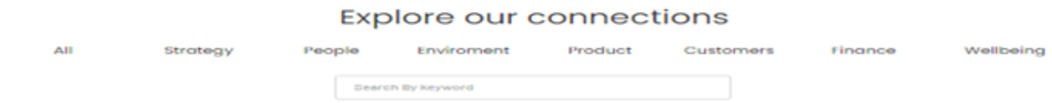
Stage 4
Query Processing

- When a user submits a search query, use SQL to query the database for relevant results.
- You can use SQL's LIKE clause or implement more advanced search algorithms, such as TF-IDF, to rank results.

Stage 5
Integration with LLM and NLP

- Integrate a Large Language Model (e.g., GPT-3.5) into your system for natural language understanding and generation.
- Use an API or SDK provided by the language model provider to interact with the model.
- Preprocess user queries and search results to enhance relevance and understanding.
- Perform tasks such as entity recognition, sentiment analysis, and language translation as needed.

Final Goal



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