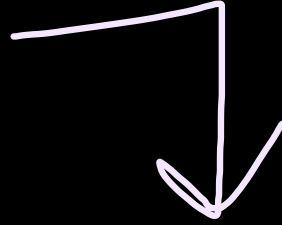
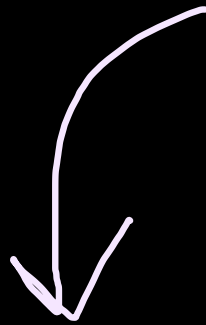


# Project Algorithm

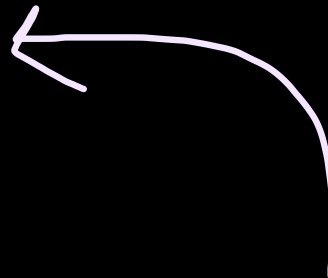
Data



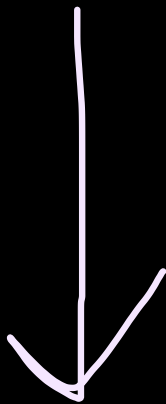
Vectorised data



Main file (streamlit)



Performance  
metrics code



Final result

chatBot function

dynamically memory update

performance parameters

How does this algorithm work?

Run the app.py (Streamlit) file first. It provides three core functionalities:

1. Ask Questions: You can interact with the chatbot and ask questions. The answers are strictly based on the data stored in data.txt.
2. Manual Memory update: You can directly write new information to the chatbot's memory (data.txt) through the Streamlit interface.
3. Fetch Articles from News: You can dynamically update the chatbot's memory by fetching the latest news articles from your desired domain using NewsAPI. The top 3 articles are stored and automatically vectorized.

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Behind the Scenes:

Initially, data.txt can be pre-filled manually, or it can be updated dynamically while using the chatbot.

This text data is then converted into vectors using CountVectorizer in the vector\_store.py file.

The chatbot uses cosine similarity to match user queries with the most relevant vector from the memory.

chatBot answer the question, strictly based on matched memory. If no relevant information exists, it simply replies with "I don't have information."

Live app: <https://imabhnn-dynamic-vectorchatbot.streamlit.app/>