VIDHARBOR: YOUR TAILORED YOURTUBE YOYAGE

VidHarbor offer an educational search platform that uses advanced language processing to connect users with curated YouTube content. It features a chat-based interface that lets users ask questions and get personalized answers, making it feel like talking to a creator directly. This approach helps users easily find reliable information and learn at their own pace, making quality education more accessible.

INTRODUCTION

The project envisions a dedicated educational search platform that revolutionizes the way users interact with YouTube channels. The platform aims to bridge the gap between user queries and relevant content by providing a comprehensive list of reputable and curated YouTube channels. This curated collection ensures that users have access to high-quality, educational resources aligned with their learning goals.

OBJECTIVE

The project objective is to make YouTube content more accessible by connecting users with curated YouTube content through an advanced, chat-based search platform, personalized to their choen channels.

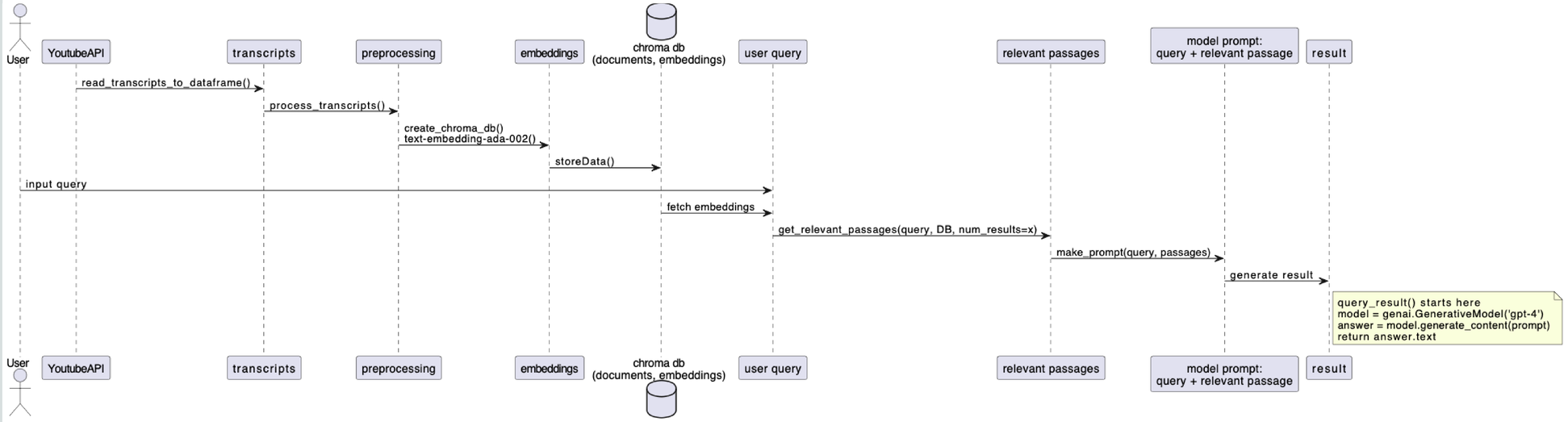
METHODOLOGY

It involves using the followings:

- YouTube API
- Transcripts data
- Embeddings
- Embeddings search based on user query
- Prompt
- GPT-4 response

PROCESS

The process fetches and preprocesses YouTube transcripts, generates and stores embeddings, retrieves relevant passages based on user queries, constructs a prompt, and uses genai.GenerativeModel('gemini-pro') to produce the final response.



SUCCESS

The platform has been successful in engaging users and effectiveness in delivering relevant insights from YouTube videos. It has seen significant improvements in search accuracy, allowing users to swiftly locate precise information from their favorite creators' content.

CHALLENGES

Despite extensive efforts, the platform faces challenges in achieving full coverage of all relevant topics, necessitating ongoing expansion of the dataset to include more channels and topics for enhanced utility. Fine-tuning the Gemini-Pro model and incorporating user feedback into the development process have been complex, requiring a careful balance between technical feasibility, resource constraints, and user needs.

FUTURE WORK

Future work for the platform includes expanding the dataset for broader topic coverage, refining the Gemini-Pro model for better query understanding, and enhancing the user interface for improved experience.

CONTRIBUTIONS-GROUP 09

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