

Project Report- GenAI Based News Generator

Introduction:

The AI Video News Generator project aims to transform the media landscape by automating the creation of news videos through cutting-edge artificial intelligence (AI) technologies. By harnessing the power of AI models and APIs, the system generates virtual news anchors that deliver news summaries based on user input.

Technologies Used:

Langchain & OpenAI: These technologies serve as the foundation of the AI-powered news anchors, enabling the generation of lifelike speech and the simulation of a professional news anchor persona.

Streamlit UI: The user-friendly interface developed with Streamlit facilitates seamless user interaction, allowing users to input search queries and receive news summaries conveniently.

DuckDuckGo Search Tool: The system utilizes the DuckDuckGo search tool to fetch relevant news articles based on user queries, ensuring the retrieval of up-to-date and accurate information.

LLM Chain Library: By leveraging the LLM Chain library, the system summarizes the retrieved news responses, providing concise and informative summaries suitable for the AI news anchors to read.

Deyen ID API: This API plays a crucial role in enhancing the user experience by generating AI news anchors that convert the summarized news content into spoken words, delivering a seamless and engaging news delivery experience.

Video Display: The generated news videos are displayed on the Streamlit web frontend, allowing users to watch the news content conveniently within the same interface.

Project Workflow:

Users input search queries via the intuitive Streamlit UI.

The system fetches relevant news articles using the DuckDuckGo search tool.

News responses are summarized using the LLM Chain library to provide concise and digestible summaries.

The D-ID API generates AI news anchors that read out the summarized news content, creating a lifelike news presentation.

The generated news videos are displayed on the Streamlit web frontend for users to watch and engage with.

Key Insights:

The project integrates state-of-the-art technologies to create a fully automated news delivery system, revolutionizing the way news is consumed and delivered.

The user-friendly interface provided by Streamlit enables convenient access to news summaries, enhancing the overall user experience.

Utilizing the DuckDuckGo search tool ensures the retrieval of relevant and timely news articles, maintaining the system's credibility and reliability.

The summarization capabilities of the LLM Chain library enable the generation of concise news summaries tailored for the AI news anchors, optimizing content delivery.

The Deyen ID API adds a layer of realism to the news delivery process by generating lifelike news anchor personas, further engaging users with the content.

Pricing:

Langchain & OpenAI: Pricing varies based on usage levels and specific features required, with subscription plans available to accommodate different needs.

Streamlit UI: Streamlit is an open-source framework, offering free usage for developers.

DuckDuckGo Search Tool: The DuckDuckGo search tool is freely accessible to both users and developers, contributing to the cost-effectiveness of the project.

LLM Chain Library: Pricing may vary based on licensing options, with some libraries offering free versions for non-commercial use and commercial licenses available for more extensive usage.

Deyen ID API: Pricing for the D-ID API is determined by usage tiers and additional services, with subscription plans tailored to distinct levels of usage and feature requirements.

Conclusion:

The Genai Based News Generator represents a significant advancement in AI-driven news delivery, highlighting the potential to revolutionize the media industry. By seamlessly integrating advanced AI technologies with user-friendly interfaces, the project offers a compelling solution for accessing news content efficiently and engagingly. With further development and refinement, this project has the potential to reshape the landscape of news consumption and delivery in the digital age, paving the way for a more immersive and personalized news experience for users worldwide.