

Final Project Option #2

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Final Project Report

Abstract

The goal of the project is to make a summarizer that reads in a PDF or inputted text. Using the API, LangChain and gradio, the GPT4All LLM, and specifically the Llama 3.8 model from the GPT4All, a mini model was model to read and input text. The value would be to read in text and provide a concise output that covers whatever the text contains.

Methods

When I started working on this project, it was a bit overwhelming trying to figure out where to start. However, reading the various articles covering the ways to handle each step, as well as watching the video provided, things became a bit clearer. It was a long process of trial and error to figure out what I had to do to get things done properly. I had initially worked with arxiv, but I didn't really like where things were going. I instead focused more on GPT4All cause things seemed to heading in the right direction for me when I started using it. Eventually, I was able to get more progress done and got it to completion.

Conclusions

I was able to make a chatbot successfully that reads in a PDF file or text that is inputted in and provides a summary of what was submitted. The summary is very thorough and covers all the details of whatever is inputted. The major limitation was that the summarization takes a long time to happen, but it would be more optimized on faster computers. On my computer, it took a long time for things to be read in and the summary provided, which would be inefficient. Any more work to be done on it would be refining the code to make things faster. I was able to get things more efficiently done, but a lot more work could be done on it.

Statement of Business Value

This would be good to have for companies that would want summaries for contracts and long reports. Having a concise summary of the document would help to have an easy reference to it and make things easier when working with said document. A user would easily be able to work with the chatbot, even despite its limitations.