Building User Interface: Platform of a Large Language Models

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Background

- Biomedical science has seen significant growth in knowledge in recent years.
- Coping with this information surge is becoming increasingly challenging for individuals.
- Large Language Models (LLMs) can store vast amounts of data but have limitations.
- Limitations of LLMs include a lack of general knowledge, logical errors, and generating incorrect information.
- A new platform called "biochatter" introduced by biocypher aims to improve biomedical analysis.
- "biochatter" is demonstrated by the web application ChatGSE.
- To address LLM limitations, the authors have implemented both general and biomedicine-specific measures.
- Well-known bioinformatics methods can be seamlessly integrated into the system.

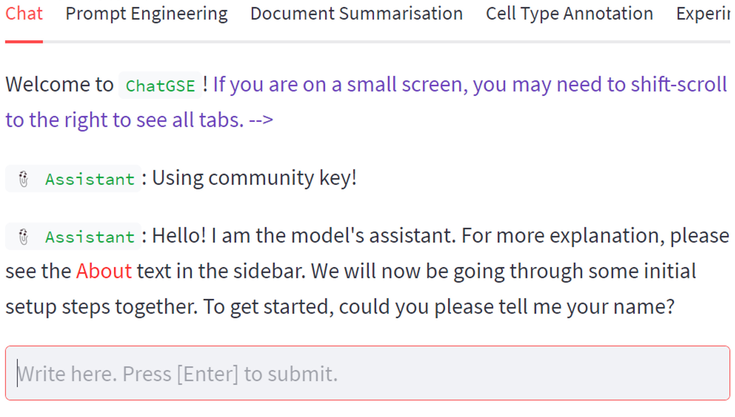

Figure 1. ChatGSE assistance

Objectives

In the upcoming update, our objective it to create a new webpage for ChatGSE.

Methods

Learned the basics of HTML from resources like react.dev and MDN web docs. And utilized CodeSandbox.io to simulate and build an HTML platform.

Figure 2. React.dev

Figure 3. MDN Web Docs

Figure 4. CodeSandbox

Summary

My previous experience with computer science is mainly in software development. I usually write scripts in LUA and work with numbers and algorithms to filter values. Building a web page using HTML was a bit challenging for me, but with Mr. Wang's assistance, I was able to finish this project. Sometimes, after modifying a string of code, the page wouldn't load up because of an error, which could lead to more problems. So, problem-solving became a skill I picked up through this experience. My key takeaway is, in the field of computer science, nothing works the first time, nothing works proficiently without rework, and nothing is easy to accomplish, but I'm sure that's the beauty of it.

Results

By utilizing codesandbox.io, I successfully developed a website featuring tables and tabs to improve the user experience, streamlining the process of saving information within each tab.

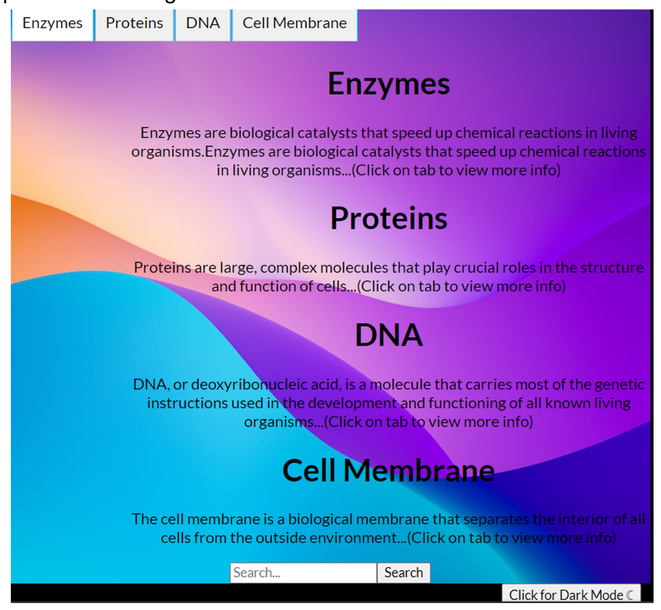

Figure 3. My version of the updated webpage

Acknowledgments

Thanks to Cankun Wang, and Qin Ma PhD.

References

1. https://github.com/biocypher/ChatGSE
2. https://developer.mozilla.org/en-US/docs/Learn/HTML/Tables
3. https://codesandbox.io/