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Progress Report

My project is to create a chrome extension that allows users to search within a page using more complex text retrieval strategies than key word matching. So far, I've made progress in two areas. First, I've created the skeleton of a chrome extension that can be successfully unpacked and ran in google chrome. Second, I've successfully created and deployed a Google Cloud Function that can import metapy and load a document. Furthermore, this Google Cloud Function is callable via a public URL which means that the chrome extension should have no issue invoking the function. I've also created a script that will automatically re-deploy my cloud function whenever I update its source code. By using metapy in a google cloud function, I avoid the extra effort of having to re-implement document indexing and document ranking algorithms in JavaScript.

I still have a fair number of tasks pending. From a client perspective, there is still a lot of work to do. Currently, the chrome extension just displays a message and has no other functionality. I need to update the extension window to include a search bar and a submit button. The chrome extension also needs to be able to collect text data from a webpage and be able to highlight specific text segments based on the response from the Google Cloud Function. From a server perspective, the work is a little more straightforward since metapy will handle most of the heavy lifting. All I need to do is take the request from the client, use that data to construct metapy documents, let metapy index the documents, let metapy rank the documents using Okapi-BM25, then return the top ranked documents back to the client.

I'm not currently facing any challenges. It took me a little bit of time to learn and get used to working with Google Cloud Functions, but I eventually got the hang of it. Chrome extensions are also completely new to me so I think it will take me a little bit of effort to get the client side working as desired (especially with regards to extracting text data from a webpage and then highlighting relevant text data within a webpage). That being said, I'm not facing any major challenges at the moment.