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Updated Proposal

Sprint 2 Individual Assignment

Regarding Sprint 2, I reideated approaches, set up the google form to interview students about current solutions and their shortcomings in the education/learning space, expanded on the approach that the team decided to move forward with and added a couple of technologies and API’s.

The approaches we had in Sprint 1 were considered to be not unique and non-novel. I understood that the approaches were not detailed enough and that at the time, we did not do enough research when generating our approaches. I thought about new approaches that were distinct based on exploring and searching analogues and what people would find useful that lacks in current solutions. After creating three approaches, I decided to go with creating a tool that can take keywords or phrases of information (related textbooks and Q&A platforms) and return main and supporting details from it. It was very unique and so far has received pretty good class feedback.

As we lacked data in Sprint 1, I figured I create a google form to get more information about how we can actually create an impactful solution. Another teammate of mine, Prerna, added some great questions and modified previous questions to the Google Form. I contributed the following: Asking major and year, if Piazza, Chegg, etc. help or slightly help or don’t help, reason for low performance in a class, favorite solution and the shortcoming to it. I gathered a lot of insight from these questions. Interviewees (GT Students) tended to like solutions that guided them through the similar problems they were inquiring about or had explained a concept thoroughly to which they could apply it to the problem. What their favorite solutions lacked were availability, sometimes explanations are not sufficient, lack of helpful resources. Our approach leverages all of these shortcomings.

Because I ideated and chose the approach, I decided to discuss the approach and thought process for choosing it. Our original approaches were not sufficient so I created new ones and the one I chose from the new ones seemed to leverage most of the pain points that students have. This approach is something I believe the team is capable of finishing by this semester and I am excited to create it.

From Sprint 1, the team was already fixed on using React Native (Frontend Mobile Development), Node.js (Backend Library for Javascript), Express.js, and VS Code. After doing research and ideation for the prototype, I considered using native files API’s, Google Drive API, DeepAI Text Analysis API, and Dandelion API. Google Drive API would be used for file uploading directly from a user’s Google Drive account. Using API’s with AI and ML are going to be very integral to our solution, so we will leverage DeepAI and Dandelion for that. The Text Analysis API will be responsible for tagging text, which extracts relevant words from a text and classifies the document. There is still more room to decide how to use text tagging. It will also be responsible for text summarization, it will be used to summarize the text that is output from the ‘Details Search’ if the user allows for it. Lastly, the Dandelion API will be used to match input texts together. So we will use the keywords or text from the user and compare it to an entire source. This will be the Details Search. There is still more room for ideation on this however.