**Insight Report**

**Prompt Engineering**

A challenge I enjoyed learning about was prompt engineering. When Jurgen was exploring the use of LLMs for classifying a folder structure, at first we had a folder name titled “Unclassified” which the LLM was using very often as there were many tokens associated with it. As a result, some files that should be in a specific folder were labelled as Unclassified. However, by changing this to ‘Miscellaneous’ that problem was fixed and we found the folder structuring to be much more effective. The lecture on assembling prompts was also helpful to guide the right way of prompting an LLM and proved helpful with both the folder structuring and search functionality.

**Learning about RAG and behind the scenes of LLMs**

I enjoyed the guest lecture by Devendra Singh Chaplot from Mistral. As a sophomore, I haven’t done many classes regarding AI so it was really interesting learning about what RAG means and how to implement it. We ended up using RAG a lot for our own project with llamaindex to figure out where information could be found.

**Using AI for code generation**

Hearing about Josh Payne’s experience in code generation for AI was really cool, and getting to follow the progress of other teams that used code generation in their slack both and website was very interesting. It was also interesting to hear about the team trying to facilitate the coding of frontend development since it’s pretty tedious work.

**Other**

On a separate note, I was able to develop frontend skills and integrating the backend with our LLMs was a cool experience to see how everything could be tied together to create a functional website.

Overall, getting to spend 10 weeks working on a project in a small team was super rewarding and really helps with applying theoretical concepts in class to a product.