Smart Searching (OLABS)

# Sub-field Partitioning:

## **Front-End Development:**

Build a website similar to OLABS, to mock how our model might work on the OLABS website.

Features:

Something similar to olabs doesn't have to be too advanced just has to show that it can present the search results.

Features are to be decided.

## **DBMS:**

Task 1: Find a database of multiple files that have texts and images like how the experiment description and explanation files in OLABS had

Task 2: Create a database to store the embeddings of the files found in Task 1. These embeddings will be used to match the search to the files that exist in our database.

## **Back-End:**

Establishing communication between the front-end and the database and the search algorithm that is to be developed

\*\*\*The establishment of communication between the algorithm and the database might be the hard part, so whoever is doing this might have to spend some time finding out how can that be done.\*\*\*

## **ML:**

Understanding Cosine similarity, distance search, and maybe other ones to figure out how to find the similarity between the natural language query and the technical terms so that the search will result in the most relevant experiments popping up. Also, not exactly sure how the natural language can be matched by the lab explanations so have to figure that out as well.