

Team Name: Fluffy Llama

Team Members: Adan Alter, Corban Pendrak, Timmy Loos

Project Title: General Nutritional Biases

Problem: What problem are we trying to solve? [0.25 point]

- Create an easy method to search the U.S. Department of Health & Human Services Nutritional Dataset by relevant divisions.

Motivation: Why is this a problem? [0.25 point]

- This dataset is important for understanding the general understanding of nutrition across the United States, but without clear divisions, it is unintuitive to understand.

Features: When do we know that we have solved the problem? [0.25 point]

- A UI should be created that allows for a seamless display of the dataset for simple analysis.

Data: (Public data set we will be using and the link to the public data set) **or** (Schema of randomly generated data - i.e. what are the different columns in our dataset and the respective datatypes) [0.25 point]

- We will use the [U.S. Department of Health & Human Services Nutritional Dataset](#).

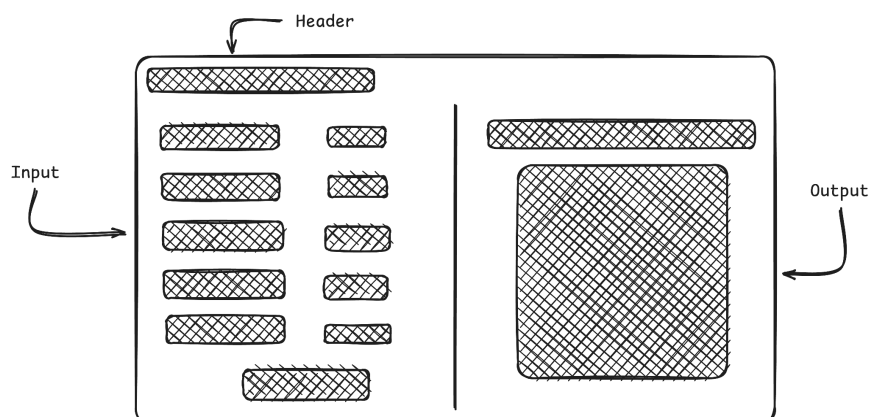
Tools: Programming languages or any tools/frameworks we will be using [0.25 point]

- C++20
- SFML

Visuals: Wireframes Links to an external site. Sketches of the interface or the menu driven program [0.25 points]

Strategy: Preliminary algorithms or data structures you may want to implement and how would you represent the data [0.25 points]

- Concurrent vs nonconcurrent
- Merge vs quick vs heap sort



- Load data using selected algorithm into objects and sort by question and state

Distribution of Responsibility and Roles: Who is responsible for what? [0.25 points]

- Design program flow: All
- Design abstract base class: Corban
- Create main method: All
- Create tests: All
- Create merge sort: Adan
- Create quick sort: Corban
- Create heap sort: Timmy
- Create UI: All
- Connect UI to methods: All