**a. Introduction**

The **Nutrition Info Finder** is a Streamlit web app that fetches nutritional data for food items using the Edamam Food Database API. It helps users easily view nutrient details to support healthier dietary choices.

**b. Usability Goals**

* **Simplicity:** Clear inputs and results for quick use.
* **Responsiveness:** Immediate feedback with spinners and messages.
* **Interactivity:** Control over nutrient display and visualization.
* **Accessibility:** Easy-to-use widgets and clear instructions.

These were achieved through sidebar inputs, sliders, buttons, and feedback boxes.

**c. Design Process**

Started with sketches focusing on a sidebar for inputs and a main area for results. Developed iteratively using Streamlit, adding API calls, data tables, charts, maps, and user feedback features to enhance usability.

**d. API Integration**

Used Edamam API to retrieve nutrition data via GET requests. Handled cases of missing data and API errors gracefully. Managed limitations of the free API plan effectively.

**e. Interactive Widgets**

* Text input for food names
* Slider to select nutrient count
* Button to fetch data
* Checkbox to toggle map display

These allow customization and improved user engagement.

**f. HCI Principles**

The app follows key principles: clear visibility, prompt feedback, consistent layout, error prevention, and minimalist design for ease of use.

**h. Conclusion**

The app successfully combines API data with interactive visuals and controls, meeting usability goals. Future improvements include adding recipe features, user accounts, advanced maps, and enhanced accessibility.