

CS 457 / 657

Homework 5 Questions

Get ready to build a food tracker! We want to provide a user with the ability to log what they eat and see the nutrient values for that food.

The USDA provides sources of nutrition information data: <https://fdc.nal.usda.gov/download-datasets.html>. Download the data for “Foundational Foods” (in the format of your choice), along with the data type documentation.

Use this outside data source to help build an initial ERD database schema (it’s ok if the actual database schema differs from your original design). Create the database in PostgreSQL and import the data. Write a query to get a user’s daily total of the different nutrients.

Submit the following:

1. The ERD of your database schema.
2. A `pg_dump` for the database schema only.
3. A `pg_dump` for the database data only.
4. Your query for getting the user’s nutrient totals for a single day.
5. The results of your query.

Check here for more information about backing up a database to a file using `pg_dump`: <https://www.postgresql.org/docs/current/app-pgdump.html>.