Food-For-You

User Documentation

Linnea Gillius, Krishna Patel, Jerry Pi, Katherine Smirnov, Lauren Van Horn | 2-23-2023 | v1

1. User Documentation Revision History

Date	Author	Description
3-12-2023	kp	Created the initial document.
3-12-2023	lvh	Added food recipient use case
3-12-2023	lg	Added food donor use case
3-12-2023	kp	Added AdminView and StaffUI use cases

2. Food-For-You Program Overview

The Food-For-You program is a tool meant for those who are facing food insecurity to have a reliable and easy to use way to find the resources they need. The recipient interface will allow these users to obtain a list of foods at individual food banks and whether or not that food bank is open at the current time the data is pulled. This allows the user to both see what food is available and conveniently see what is currently open as the times for all the food pantries are

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scattered. This program will also allow donors to see what is in low stock at food pantries to see what items are in need of donations. This interface will also show what locations are currently open. Lastly, this program is also meant to aid the staff at food banks and food pantries by allowing the easy manipulation of what data is stored in the system. The staff are able to search for items, add items, move items to different locations, and update what quantities are available. Whenever an item is updated to be a lower quantity it is also recorded so administrators can see trends that can help them improve the services they offer to the community. This can be accessed through an admin interface where current items can be exported to a csv, and the administrators can add new food pantries with the option to bulk add food items via a file upload. The data populated in the system is fake data as the spreadsheet used to order items to food pantries could not be shared by the individuals we interviewed.

3. Installation

1. Unzip the source file once it is downloaded into a folder called "Food-For-You".
2. Open the terminal on your computer. (Powershell on Windows, Terminal on Mac.)
3. Navigate to the directory where the file is downloaded to. This is usually done by typing "cd Downloads/Food-For-You" and pressing return. If the file is in a different directory type "cd *your_directory_path*/Food-For-You" and press enter.
4. If you do not have Python 3.x installed, go to https://www.python.org/downloads/ to download and install the latest version.
5. If you do not have mysql-connector, or tkinter installed, type "pip3 install mysql.connector-python" to and press return to install mysql-connector, and type "pip3 install tk" to install tkinter.
6. Once step 5 is finished, type "python3 <interface>" in your terminal where <interface> is replaced by the file you want to execute from the options "staffUI.py," "AdminView.py," "RecipientUI.py," "DonorUI.py"
   a. To see how to use these individual files, see Section 5, "Use Cases."
7. If you need to reinitialize the database values, please see Section 4 "Database Installation."
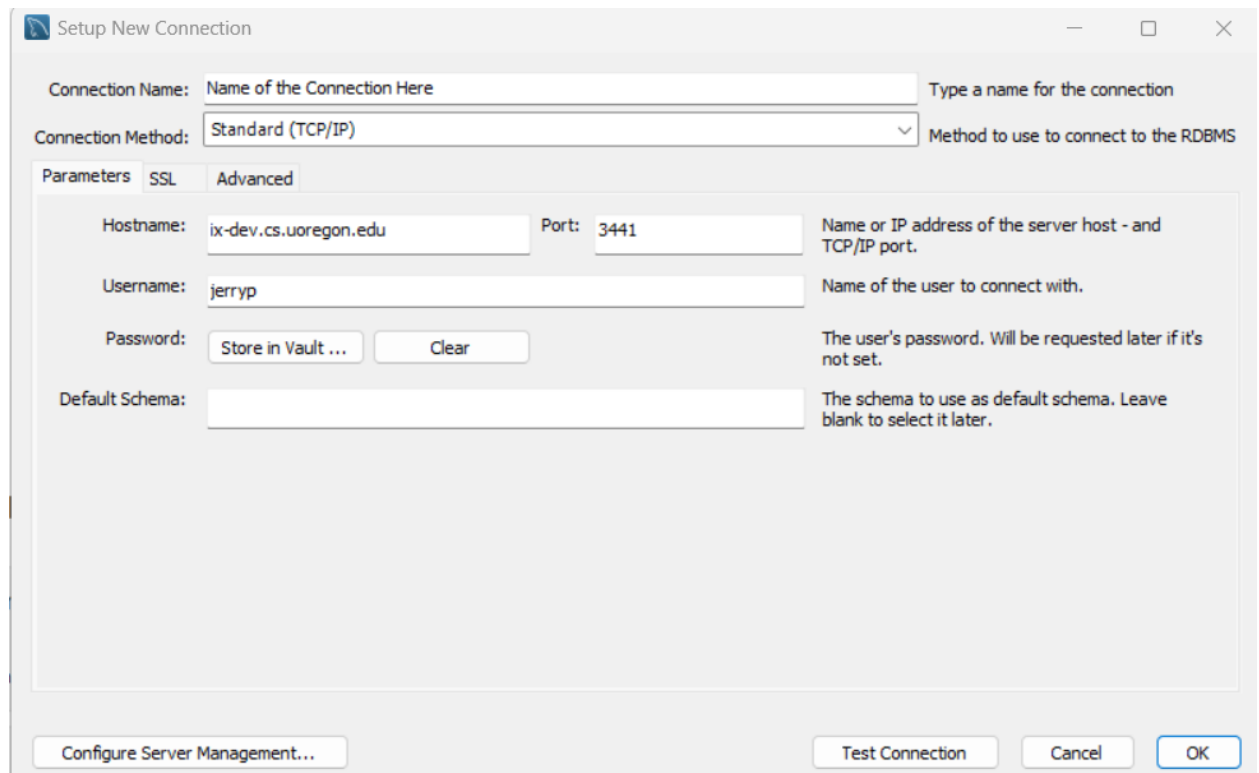
4. Database Connection

1. The Food Resource Database Module is populated with initial data. Skip this section to perform applications with the initial data. However, a user is able to reinitialize the database using the steps below.

   Note: this instruction set will only reinitialize the table fields and its values that are in the original **foodforyou** database created by the project group. To start a new connection on the server or create a new database, please refer to the installation instructions.

2. In any visual database design tool (this instruction set will use MySql Workbench as an instance), click on the '+' button next to the **MySql Connections** to add a connection.
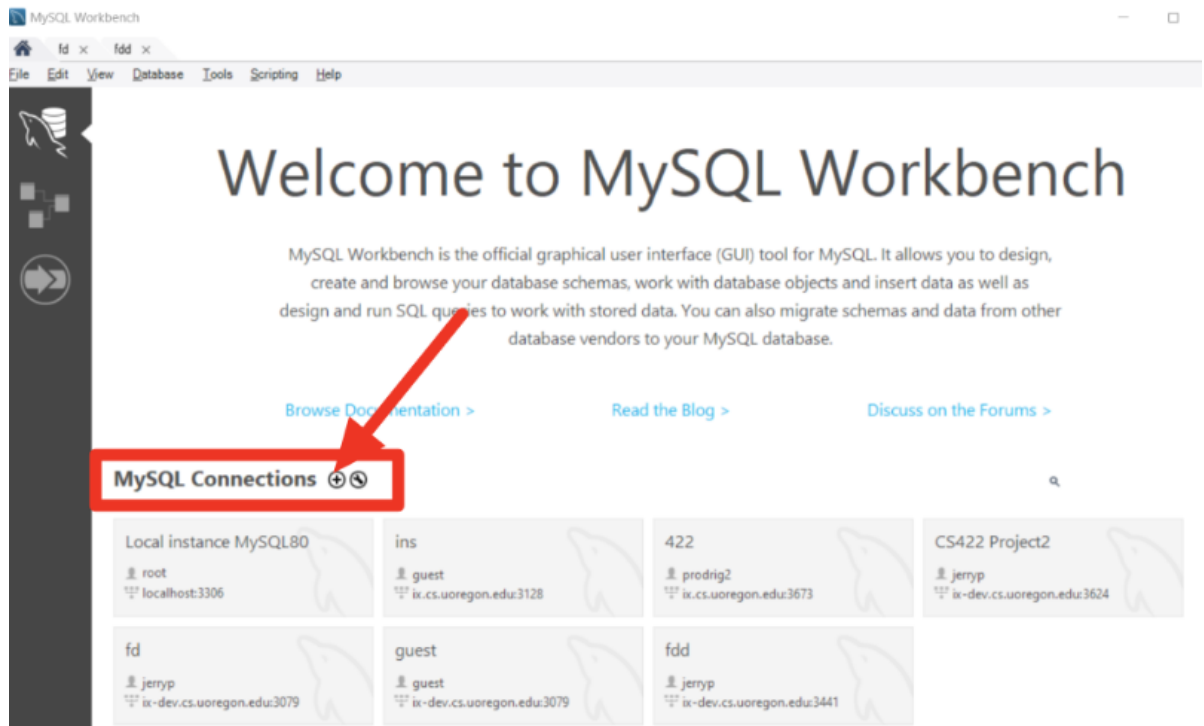
3. In the connecting page, input a name for the connection.
4. Input **ix-dev.cs.uoregon.edu** for the Hostname field, **3441** for the Port field, **jerryp** for the Username, and **111** for the password.

5. Now click on the connection that was created and open the database.
6. On the top left of the screen, click **File** -> **Open SQL Script**, select the *422-finalv2.sql* file in the project directory. The sql file should open in a new tab.
7. Click on the lightning bolt icon on the top of the screen and wait for the sql file to finish running. Once it finishes, the database values should be reinitialized.
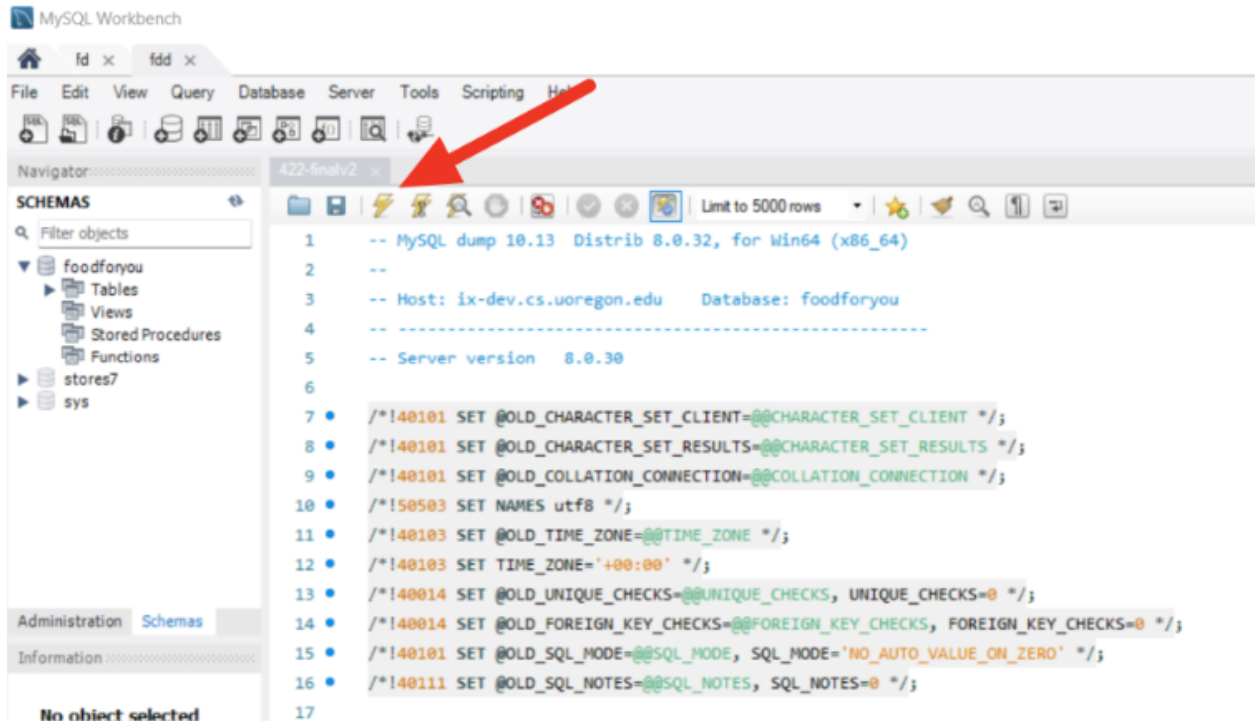

5. Use Cases

● 5.1 Looking for Food (Food Recipients)
### ○ 5.1.1 Looking for availability of Food in a Neighborhood
   - ■ To search for a certain food category in a particular neighborhood, use the drop down boxes in the picture below. You can also click on any combination of the 4 checkboxes to specify what additional information you would like displayed. The default options are All Food and All Neighborhoods. You can specify both, one or none of the options to get different understandings of food availability.
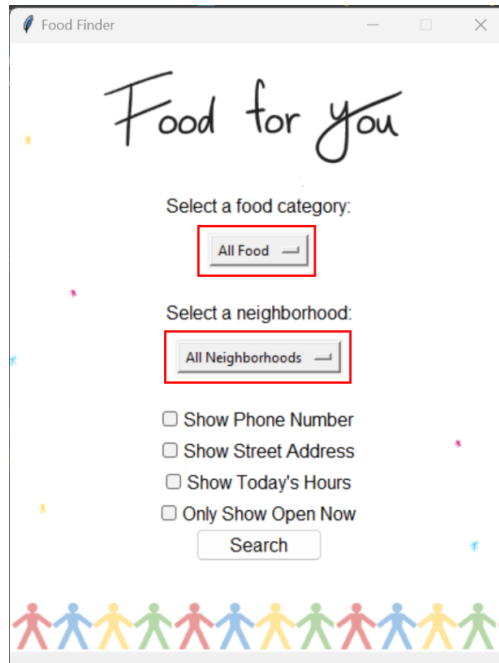
Food-For-You Recipient Interface

● 5.2 Looking for Locations to Donate Food (Donors)

Use the dropdown menus boxed in red in the picture below to search for food banks in a particular neighborhood that need a specific food category. If you do not have a specific neighborhood or food category in mind, the default options are All Neighborhoods and All Categories, respectively. You can also click on any combination of the four checkboxes to specify what additional information you would like displayed.
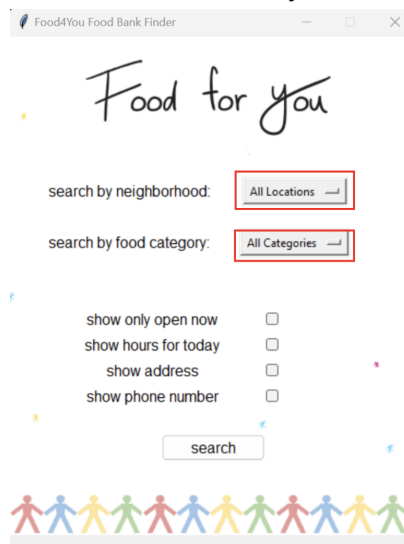
Food For You Donor Interface

- **5.3 Staff Modifying Items in Food Database (Staff)**
  - **5.3.1 Searching to Find Item**
    - To search for an item, use the filters shown by the red rectangle in the picture below. "Search by item" will allow you to look for an item by specific name. "Sort by location" will allow you to filter by only one food pantry/food bank location. "Sort ascending quantity" will display items in lowest to highest quantity. These filters can all be combined and used at the same time. Once the filters are selected hit "Search."
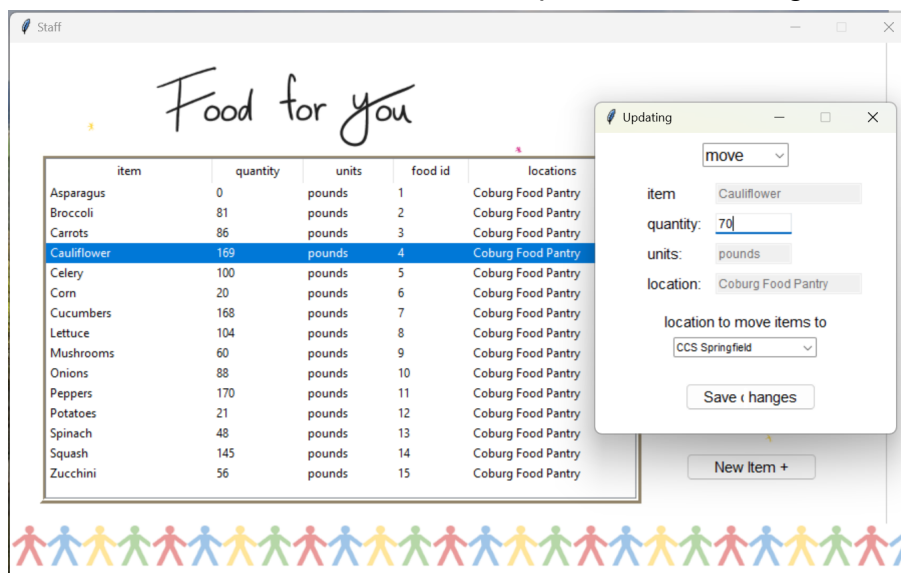

  - **5.3.2 Updating an Item**
    - To update an item, search for the item you want to update using the filters like in 5.3.1. Once your item is found, use your mouse to click the item in the database and a new window will open. By default the option shown will be "update" in the dropdown, if this option is changed, use the dropdown and select "update" again. Once this is done you can change the quantity and units. If the quantity entered is less than originally specified, the quantity reduced will be recorded in another table for record keeping purposes. This is done because the item is assumed to be distributed to a food recipient when the quantity is decreased. This can be accessed from the adminUI. Once the quantity, and units are changed, press "Save changes."
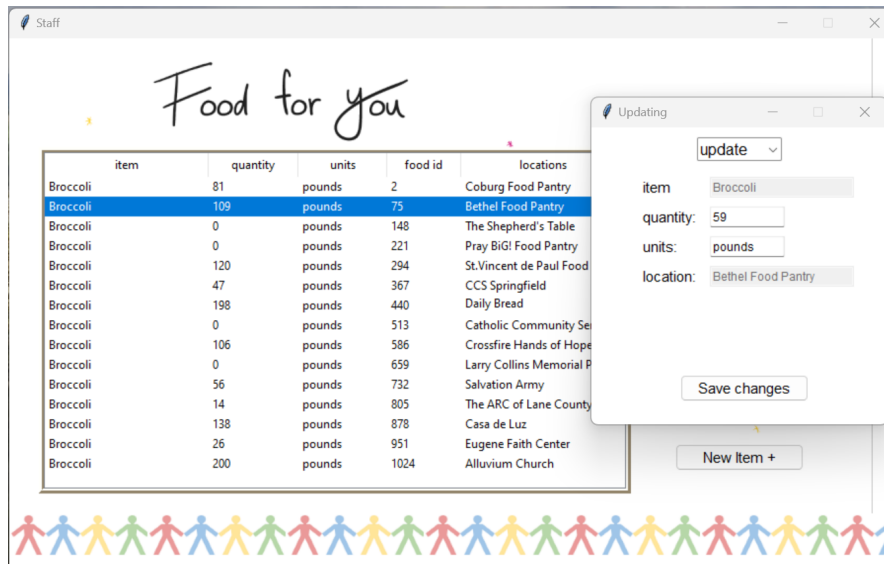
- ○ **5.3.3 Moving an Item**
  - ■ To move an item, search for the item you want to update using the filters like in 5.3.1. Once your item is found, use your mouse to click the item in the database and a new window will open. By default the option shown will be "update" in the dropdown, change this option to "move." Select the quantity you want to move to another location by typing a number in the "quantity" box. This number cannot be greater than what it was when the window opened. Next, choose a location to move it to from the dropdown, the new location must be different from the current one. Once the quantity and location have been selected, press "Save changes."


- ○ **5.3.4 Deleting an Item**

- To move an item, search for the item you want to update using the filters like in 5.3.1. Once your item is found, use your mouse to click the item in the database and a new window will open. By default the option shown will be "update" in the dropdown, change this option to "delete." Next, hit "Save changes" and that row in the food table will be deleted.
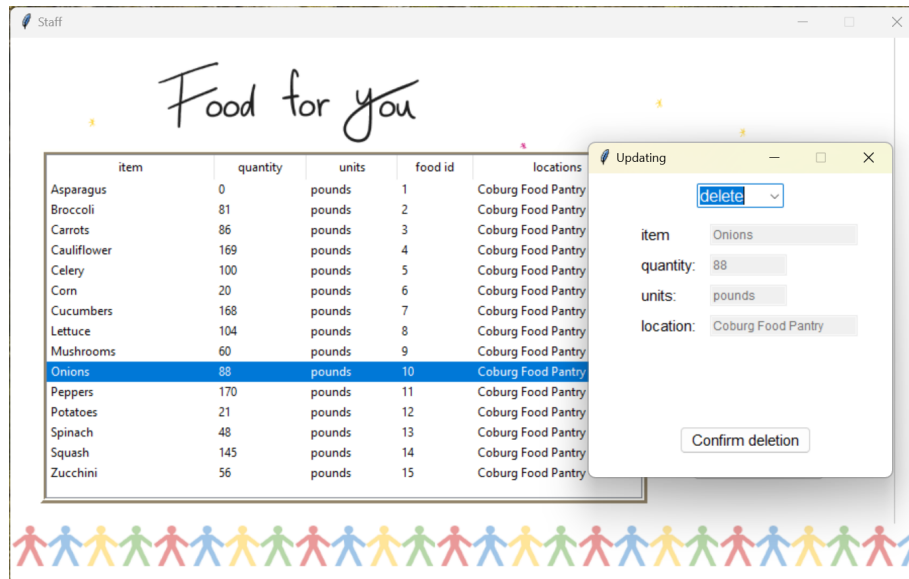
- ○ **5.3.5 Adding an Item**
  - To add an item, press "New Item +" in the main window. A new window will open, in this window populate all the fields. The item field is the food item name. The category field is the type of food it is, for example, vegetables. The quantity is the number of this food item that needs to be added, it must be a non-negative integer. The units field is the measurement of the item, for example, pounds. The location is which food bank or food pantry the item will be at. Once these fields are all populated, press "Save changes" and the item will be added.
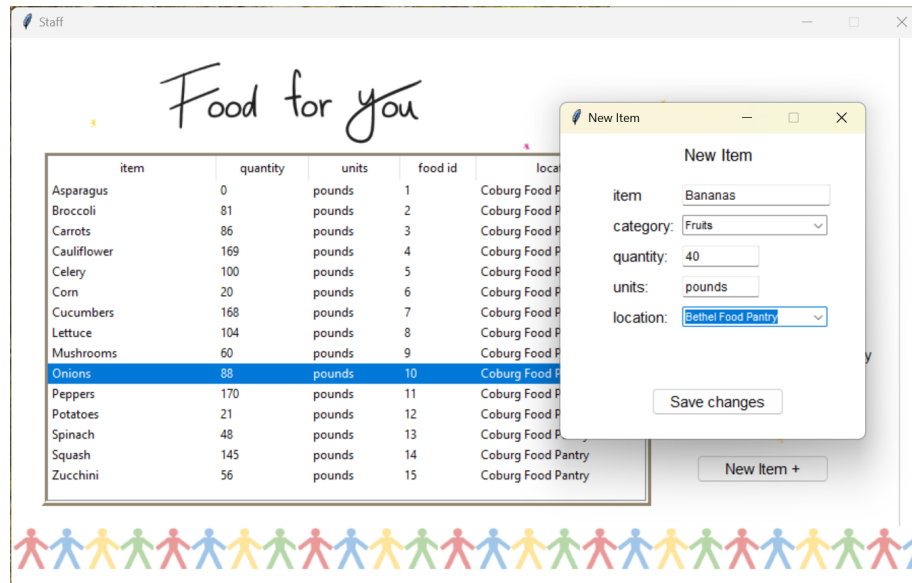
● 5.4 Adding New Food Banks (Admin)

   ○ To add a new food bank, use the AdminView.py file. Upon launch, press "New Food Bank +" and the window below will open.

   ○ To this window
     ■ Type a street address below "Insert Street Address"
     ■ Type a food bank name below "Insert Food Bank Name"
     ■ Type a neighborhood below "Neighborhood"
     ■ Type a phone number below "Phone Number"
        ● This must be in the format (XXX) XXX-XXXX
        ● All X's must be digits 0-9
     ■ Select open and close times for this food bank for Mon-Sun
        ● Use the arrows to increment both times.
        ● The open time must be earlier than the close time.
        ● To indicate a food bank is closed, make the close and open time equal, for example both 00:00, 00:00, and 13:22, 13:22 will indicate a closed food bank since they are both equal.

- ○ Next, in this same window, click "Upload Data" which will open the window below. It may look different depending on your operating system.
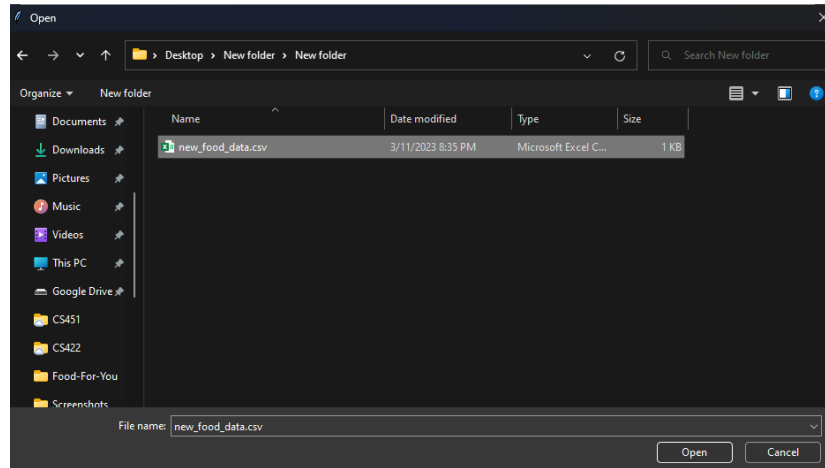
- ■ Find and select a .csv file containing food items using your system's dialogue to upload to this food bank. See section 6.1 to see file format requirements for this file.
- ■ Click "open" once a file is selected to pass it to the program.
- ○ Next click "Save Changes" and the data will be added to the database.

- ○ Upon Successful insertion of data and a food bank, items in the database from this food bank will be displayed in the table.

item	quantity	units	food_id	locations
apple	0	lbs	1103	Example Food Bank
grapes	40	lbs	1104	Example Food Bank
grapes	20	lbs	1105	Example Food Bank

New Food Bank +

- ## 5.5 Viewing Outgoing Items
  - Outgoing items are items that have been handed out to food recipients, this data is for record keeping.
  - To view outgoing items, open AdminView.py, and click "Data Log" at this point you will see a screen familiar to the staff UI, follow section 5.1.3 to use the search.

- ## 5.6 Exporting Outgoing Items
  - To view outgoing items, open AdminView.py, and click "Data Log" at this point you will see a screen familiar to the staff UI, follow section 5.1.3 to use the search.
  - To export all data in the outgoing items table to a .csv file, click export. Next, navigate to where the program is stored and find a file called "FoodForYou_Export_<timestamp>" and open it in a spreadsheet software of your choice to view. All data in the outgoing table is still preserved.

6. File Format Requirements

1. File Upload for Adding New Food Bank

For the addition of a new food bank, the data file must be in a .csv format. Each food bank addition will require its own file. The first line must contain a header with the following format:

Item, category, quantity, units

The lines that follow after this header, must replace each word in the header with the actual data separated by commas. Additionally, the quantity must be an integer number that is non-negative. If there are duplicate entries where the name, units, and categories are the same the two entries will have their quantities merged together, For examples see the following lines:

"Apple, fruits, 20, pounds"

"Peaches, canned, 40, cans"

An example of this data in spreadsheet software:

	A	B	C	D
1	item	category	quantity	units
2	Apple	fruits	20	pounds
3	Peaches	canned	40	cans
4				

An example file SampleNewFoodBankData.csv has been provided to test the functionality of inserting a new food bank.