Quartermaster Developer Documentation

sudo-nano

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Contents

1 Interface

The primary interface of the `quartermaster` program is the `prompt()` loop in `main.py`. It provides the user with a prompt, then takes their input and `match`es it to the list of valid commands. If it matches one, then it runs the appropriate function from `mechanics.py`.

2 Commands

2.1 calc

The `calc` command takes two parameters, a recipe and the quantity of that recipe.

3 Data Formatting

3.1 DataSet Class

The `DataSet` class is an object type for holding all the imported data in a `quartermaster` session. There is currently only one `DataSet` object, called `default_dataset`. All data imported from files is loaded into the session DataSet object.

3.2 TOML file formatting

Ingredients and recipes are stored in separate TOML files. (People and groups will be stored in separate TOML files as well when they are implemented.) Any number of TOML files can be imported into the current session. Each TOML file begins with a basic string `type` that specifies either `ingredients` or `recipes`. (Other types not yet implemented.)

3.3 Ingredient Files

Ingredient files must have `type = "ingredients"`, otherwise they will not be imported. This is meant to prevent accidentally importing other types into the session ingredient dataset.

Each ingredient is one table in its TOML file. Example below. See the included test_ingredients.toml file for more examples.

```
[rice]                  # Ingredient name in header
unit = "gram"           # Unit of measurement
price_per_unit = 0.01   # Price per unit of measurement

# List of lists, each sub-list describing quantity of purchase
# and cost of purchasing that quantity.
purchase_increments = [ [1000.0, 5.00] ]

# List of diet incompatibilities that conflict with this
# ingredient. Leave list empty if there are none.
diet_incompat = []
```

3.4 Recipe Files

4 Planned Features

- Meal Plan object
  - Allows easy planning for a limited subset of meal options
  - Ability to check meal plan compatibility with a set of people

  - Suggest necessary modifications for incompatibilities?

- Person object
  - Allows specification of dietary restrictions
  - Contains a float describing how many standard servings they will consume per meal

- Group object
  - Allows grouping of Person objects
  - Later, there will be a command to calculate the required supplies for a given group, meal plan, and length of time to supply the group.