System & User Documentation for Grub Geeks

- *Nutritional website with calorie calculator designed for students*

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An overview of the project

Grub Geeks is a web application in which college students can find healthy and easy to prepare student-friendly recipes. Grub Geek's goal is to provide healthy and easy to prepare recipes, a community forum, and recipe recommendations based on calorie intake for a college student target demographic.

Our web application offers student collaboration via the forum board where a registered user can post recipe recommendations and/or reply to current forum post(s). In addition, the main feature of the site is the user's ability to interact with the "Calorie Tracker" which recommends recipes based on a calorie deficit calculation from user's calorie input.

Main features

Grub Geek's web application main features include:

- A list of healthy and easy to prepare student-friendly recipes
    - All featured recipes meet our "student friendly" standards of:
        - Limited ingredients
        - Health ingredients low in carbs high vegetable options
        - Easy preparation
    - All featured recipes provide the following information:
        - Serving size
        - Preparation time
        - Cooking time
        - Calories
        - Nutritional information (grams of protein, fat, etc.)
        - Cooking instructions
- "Calorie Tracker" which recommends recipes based on a calorie deficit calculation from user's calorie input of daily limit and intake for said day.

- A student community forum where a registered user can:
    - Post recipe recommendations
    - Reply to current forum post(s)

How to user can use/access the software

For an end user to access Grub Geeks web application a user would need an internet connection and web browser. A user will not need to install further software to run the Grub Geek's web application. The user would simply need to visit Grub Geek's website within a web browser which is connected to an active internet connection.

Quality attributes

The Grub Geeks team decided on the following quality attributes:

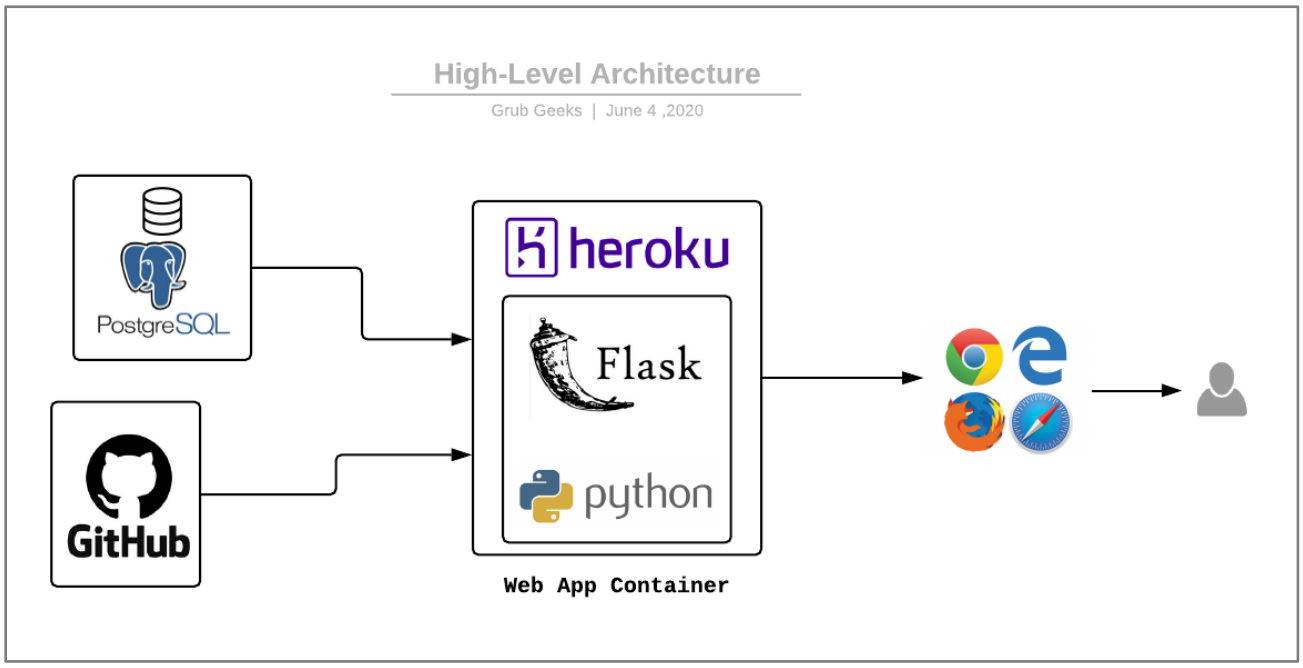
- Usability
- Simplicity
- Reliability

Upon selection of the above quality attributes there was consideration of the end user as well as catering to the target demographic. These quality attributes were chosen to best support a user's experience with Grub Geek's web application.

An overview of your software's architecture and design

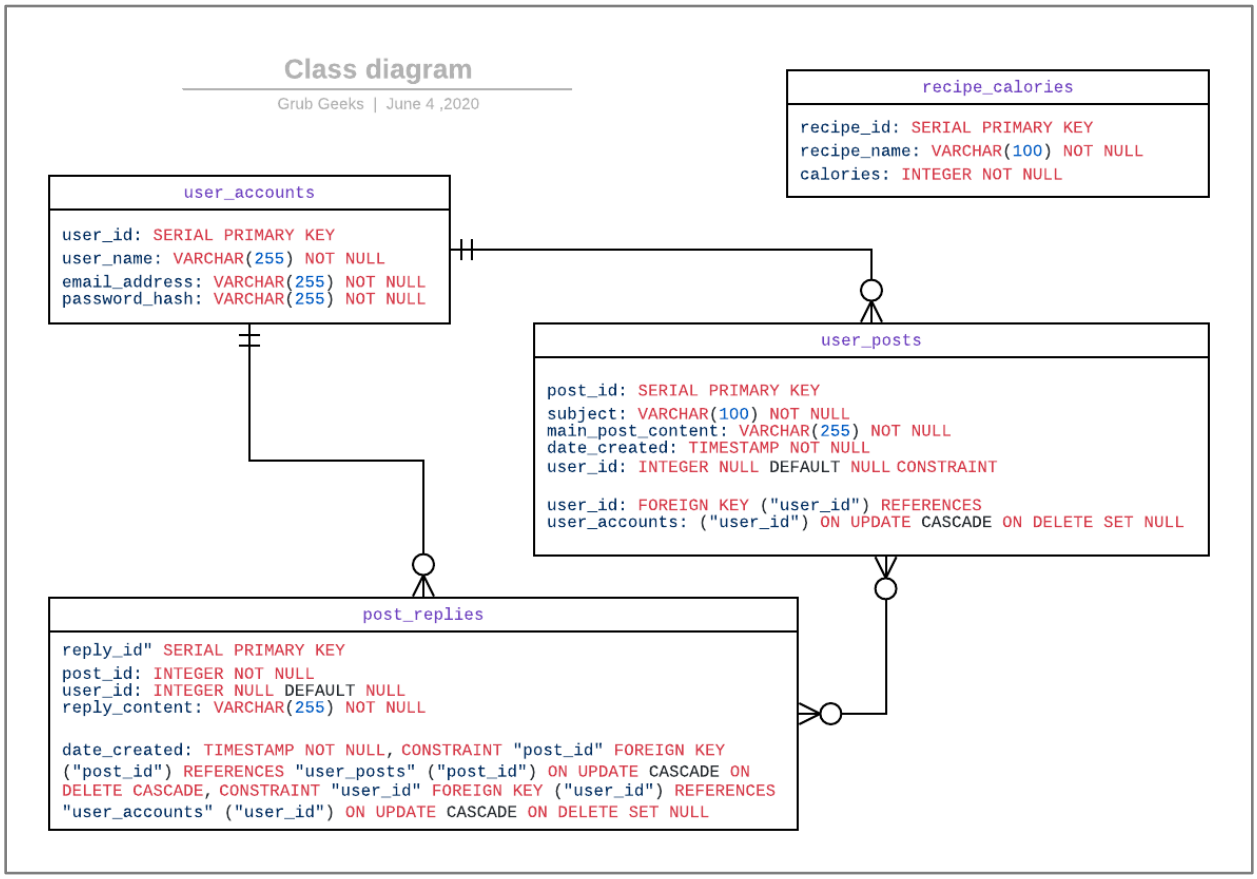
Architecture

Grub Geek's utilizes Heroku, Flask, Python 3, PostgreSQL, and GitHub. In which GitHub contains our code. PostgreSQL maintains the database for users and recipes. Heroku hosts the website and utilizes which utilizes Flask and Python



Design

Grub Geek's design below is a class diagram which represents the ERD of the current entities. Much of Grub Geek's entity relationships are within the forum. In which a user can have many posts and many replies. While a post can only have one user but many replies. As with a reply there can be many replies to a post but only one user per reply.



Design pattern

Originally, the "Adapter" design pattern was chosen but after reviewing the code the design pattern was incompatible. We attempted to fit other design patters as well, yet they weren't a good fit either. Therefore, our team decided to go with the "Prototype" design pattern.

The code was then modified to form a "base class" and two "classes" that inherit from the "base". Upon this implementation our staging Heroku app compiled and was built yet would not run. Heroku

logs revealed there might be an issue with the “inherited class” code. As of today, this issue regarding “sqlAlchemy” issue has been resolved.

Final state/condition of the software

There is a bug within the results page which were just found upon deployment of the Grub Geeks web application. As of this moment the calories currently aren’t matching the recipes. It is a simple fix without our entry retrieval within our database our team is committed in fixing.

As for what’s left within the “Product Backlog” our team has completed all their task. At this moment nothing remains within the “Product Backlog”.

Explanation of file structure of the project

cs361-s20-grubgeeks

Procfile
README.md
basic.py
requirements.txt

I. myproject- *Contains web application project files*

__init__.py
dbModels.py
db_setup.sql
forms.py
grubgeeks.db
grubgeeks.db.sqbpro

a. __pycache__ - *Contains code for Python 3 bytecode compiled/executed*

__init__.cpython-38.pyc
dbModels.cpython-38.pyc
forms.cpython-38.pyc

b. static- *Contains CSS global styling folder and web application images*

i. CSS-files- *Contains global styling CSS code files*

base_recipe.css
style.css

G_g_recipe_bg.jpg
android-chrome-192x192.png
android-chrome-512x512.png
apple-touch-icon.png
brussels_sprouts.jpg
brussels_sprouts_roasted.jpg
bsprouts.jpg
carousel_pic1.jpg
carousel_pic2.jpg
carousel_pic3.jpg
carousel_pic4.jpg

carousel_pic5.jpg
chicken_quesadila.jpg
chickenquesadila.jpg
credits.txt
favicon- 16x16.png
favicon-32x32.png
favicon.ico
footer.css
green_beans.jpg
italian_parmesean_chicken.jpg
lemon_rosemary_salmon.jpg
lemon_salmon.jpg
logo.png
orange_chicken.jpg
quesadilla.jpg
salmon.jpg
site.webmanifest
sweet_potato_chips.jpg
sweet_potato_fries.jpg
thai_basil_chicken.jpg
white_bean_soup.jpg

c. templates- *Contains HTML code files for the web application*

400.html
401.html
403.html
404.html
408.html
500.html
503.html
add_post.html
base.html
base_recipe.html
calc_results.html
calorie_calc.html
chicken_quesadila.html
entrees_gallery.html
footer.html
forum.html
green_beans.html
index.html
italian_parmesean_chicken.html
lemon_rosemary_salmon.html
login.html
my_account.html
orange_chicken.html
post.html
register.html
roasted_bsprouts.html
sweet_potato_chips.html
thai_basil_chicken.html

white_bean_soup.html

II. recipes- *Contains website's recipe information such as recipe title, calories, ingredients, etc.*

chicken_quesadilla.txt
credits.txt
green_beans.txt
italian_parmesean_chicken.txt
lemon_rosemary_salmon.txt
orange_honey_chicken.txt
roasted_brussels_sprouts.txt
sweet_potato_chips.txt
thai_basil_chicken.txt
white_bean_soup.txt