Custom Recipe Manager

A web-based recipe manager that allows users to create, browse, and share recipes. This is a database-driven application that includes user accounts and support for searching and managing shared ingredients and recipes.

Documentation:
The custom recipe manager apps contains the following features

Users need to register for an account or log in if you already have one.

1. **Feed**
   a. Search bar
      i. filter to by, recipe, ingredient, author and type
   b. Contains all public recipes in a card format
      i. Display basic information, title, author, type, servings
      ii. Can favorite recipe

2. **Create Recipe Form**
   a. Insert new recipe data or edit existing recipes
   b. Insert or manually create ingredients
   c. If authored, allows user to switch between 'view mode' and 'edit mode'
   d. Can favorite recipe

3. **Profiles**
   a. Contains user information
   b. If authored, allows users to edit their own information.
   c. Contains recipe statistic

4. **Favorites - extends feed**
   a. Contains all currently favorited recipes
   b. You can add recipes to your favorites and they will show up on this page
   c. The favorites tab is on the Nav bar at the top.

5. **Home Page**
   a. Includes featured recipes which show 3 recipes.
   b. Welcome message for the user.
   c. Has buttons to navigate to favorites page, all recipes, and create recipe

Database Schema:

1. Recipe Table — Name | Type | Description | Author | Instruction Steps | servings
2. Ingredients Table — Name | Unit | Calories Per Unit | Description | Total Fat | Cholesterol | Sodium | Total Carbohydrates | Protein
3. Linking Table — Recipe id | Ingredient id | quantity per serving | unit

4. Favorites Table   User id | Recipe Id
5. Meal db Table   Recipe id | meal id | image url | video url | area | category
6. User Profile Table   User id | name | bio | profile picture
7. Recipe Images Table Recipe id | image

Functionality:

1. **All recipes are public.**

   After logging in the user is presented with a feed page that contains all publicly known recipes. Each recipe has a card which can be clicked on to view that individual recipe.

2. **Ability to search ingredients by name.**

   In the feed page, the user can use a search bar at the top to search any recipe.

3. **Ability to search recipes by name and type.**

   Along with the search bar in the feed page, there is a filter dropdown which will allow the user to search by name, type, or author.

4. **Ability to create new recipes**.
   After clicking on the "add recipe" button on the feed page or if they choose to edit their own existing recipe. Here they will be able to fill out the information for their recipe and insert ingredients. The recipe is inserted upon clicking save recipe.

5. **Ability to add new ingredients.**

   In the recipe page, if editable, the user will be allowed to search or add ingredients manually. To do this there is a search bar which matches ingredients listed from the search string. Otherwise there is a button which gives the user a form to define their own ingredient which is inserted when saving the recipe.

6. **Ingredients are shared across users and cannot be edited once created.**

   After ingredients are added to the db as described above, the user will be able to find the ingredient through the ingredient search bar either through the filter in the feed page or recipe page search bar.

7. **Ability to edit recipes authored by the logged-in user only. /**
   Users cannot edit others' recipes.

   When clicking on a recipe in the feed page, a check runs to see if the user is the author or the page. If so, the page is made editable, allowing them to input data into the fields

where it is stored when the recipe is saved. This is also the case by default when the user adds a new recipe.

Requirements for Full Grade

1. **Import data from TheMealDB API to populate recipes (import only once; the import code must be included).**
   API endpoint: import_recipes().
   Imports using the file import_from_TheMealDB.py to fetches recipes from TheMealDB in JSON format and populates the local database with recipe information. This also populates the feed with recipes.

2. **A professional, self-documenting, and intuitive user interface.**
   UI is split into a feed with a search bar and a create recipe form. Interesting data is available through favorites and profiles.

3. **A public search API for recipes (JSON format).**
   http://127.0.0.1:8000/Proj19/api/recipes

   Populates the recipes and ingredients in json format like the mealdb has.

4. **Secure recipe editing logic: only allow authors to modify their own recipes.**
   API endpoints: create_recipe_form and view_recipe_form. Passes a boolean variable edit_mode that sets the mode of the recipe page to editable. If the author is the user or the user creates a new recipe, then edit mode is true. Otherwise false. This means that users can view recipes that aren't their own and can also edit their own recipes.

5. **Automatically compute total calories per recipe based on ingredients and quantities.**
   Based on the Ingredients and user entered data for nutritional info per ingredient, a per-serving nutritional data count and a Total (All serving) nutritional data count will be shown.

Optional Features (for extra credit)

1. **Support for multiple images per recipe.**
   -Sharif

2. **Ability to search recipes by ingredients (any subset).**
   Filter dropdown next to the search button allows the user to search by ingredient. Uses search logic to filter search query through ingredients db

3. **A public search API for ingredients.**
   An endpoint that allows external applications to search and retrieve ingredient information from the database. includes calories, fat, cholesterol, sodium, carbohydrates, and protein per unit.

4. **Store additional nutritional info beyond just calories.**

More fields in ingredients, took data from a nutritional food label. Total Fat, Cholesterol, Sodium, Total carbohydrates, protein. Users can define this by manually adding ingredients.

5. **Automatically scale ingredients when changing the number of servings.**
The "Total" nutritional column will have data that scales with the number of servings that the user manually adjusts.

Setup

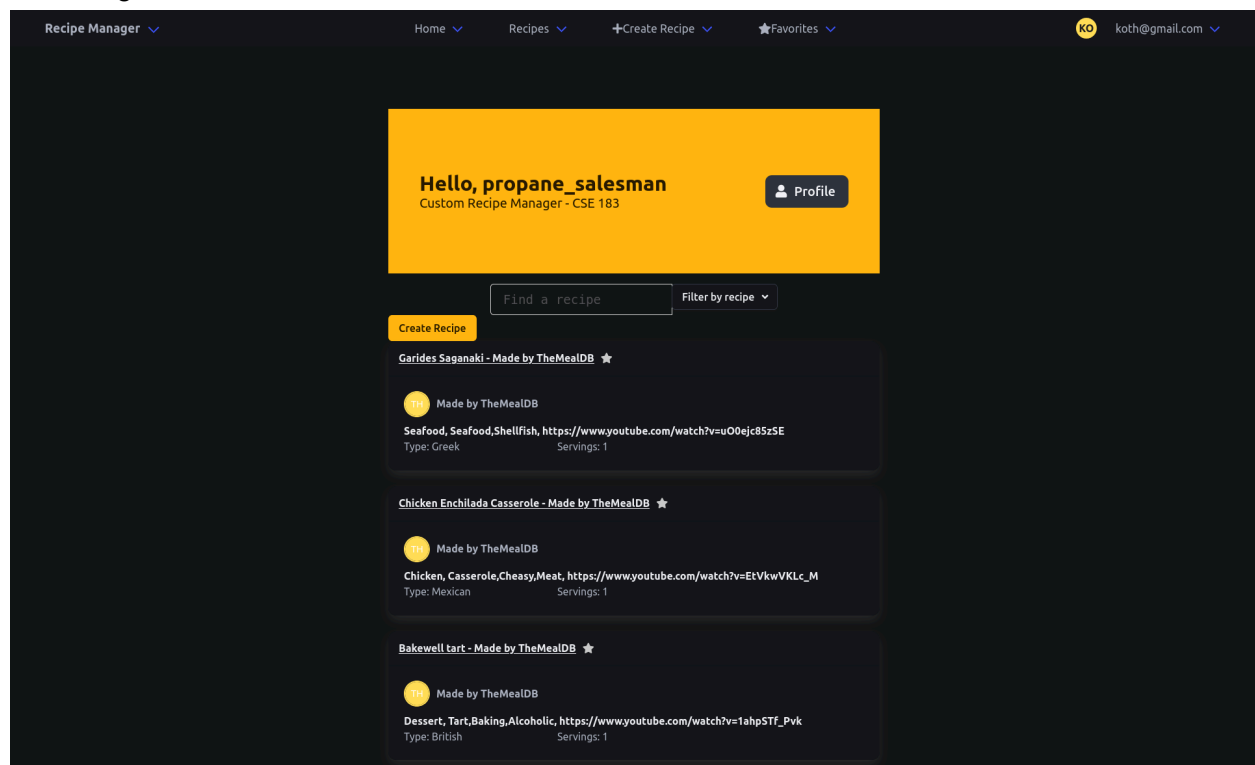1. Clone the repository to your local machine.

2. Install dependencies:
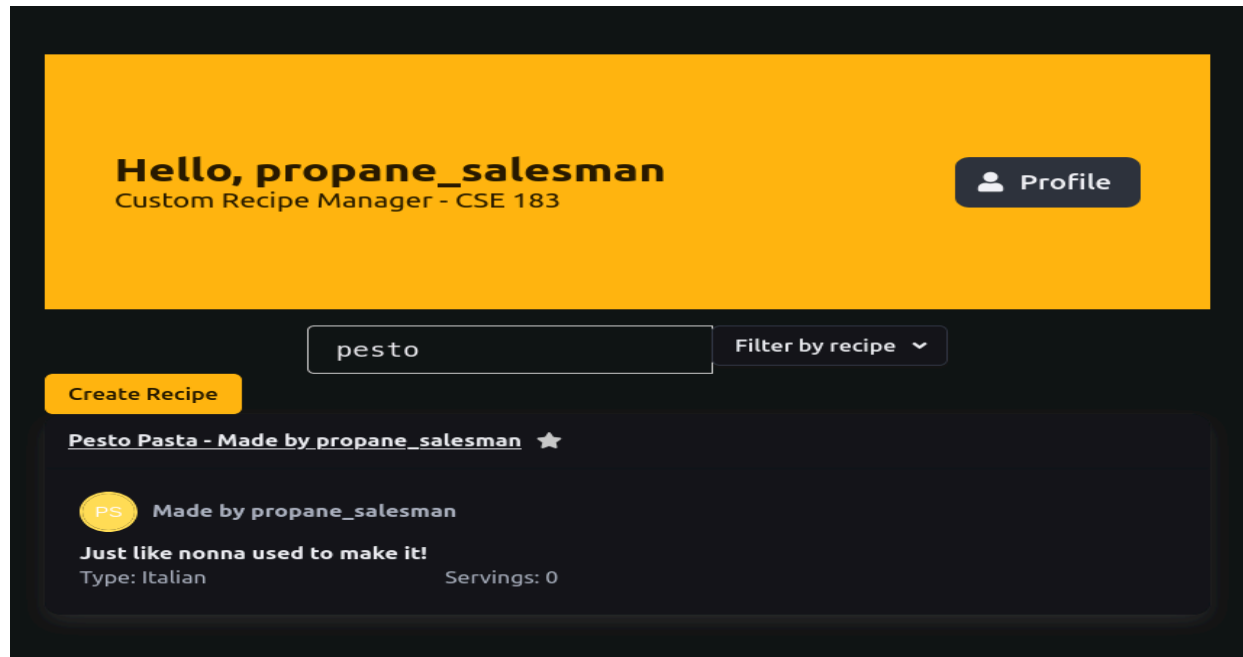
   pip install -r requirements.txt

3. Start the server:

   python -m py4web run apps

4. Open your browser and go to: http://localhost:8000/Proj19

Feed Page

Search for recipes

Hello, propane_salesman
Custom Recipe Manager - CSE 183

Profile

pesto   Filter by recipe ⌄

Create Recipe

Pesto Pasta - Made by propane_salesman ★

PS Made by propane_salesman
Just like nonna used to make it!
Type: Italian   Servings: 0

Search by ingredient

Hello, propane_salesman
Custom Recipe Manager - CSE 183

Profile

pasta

Filter by ingredient ⌄

Create Recipe

Chicken Alfredo Primavera - Made by TheMealDB ⭐

TH **Made by TheMealDB**

Chicken, Pasta,Meat,Dairy, https://www.youtube.com/watch?v=qCIbq8HywpQ
Type: Italian   Servings: 1

Seafood fideuà - Made by TheMealDB ⭐

TH **Made by TheMealDB**

Seafood, https://www.youtube.com/watch?v=itsFEc8W468
Type: Spanish   Servings: 1

Search for recipes made by other users

Hello, propane_salesman
Custom Recipe Manager - CSE 183

Profile

propane_salesman

Filter by author ⌄

Create Recipe

Pesto Pasta - Made by propane_salesman ⭐

PS **Made by propane_salesman**

Just like nonna used to make it!
Type: Italian   Servings: 0

Search by cuisine type

Hello, propane_salesman
Custom Recipe Manager - CSE 183

👤 Profile

greek

Filter by type ⌄

Create Recipe
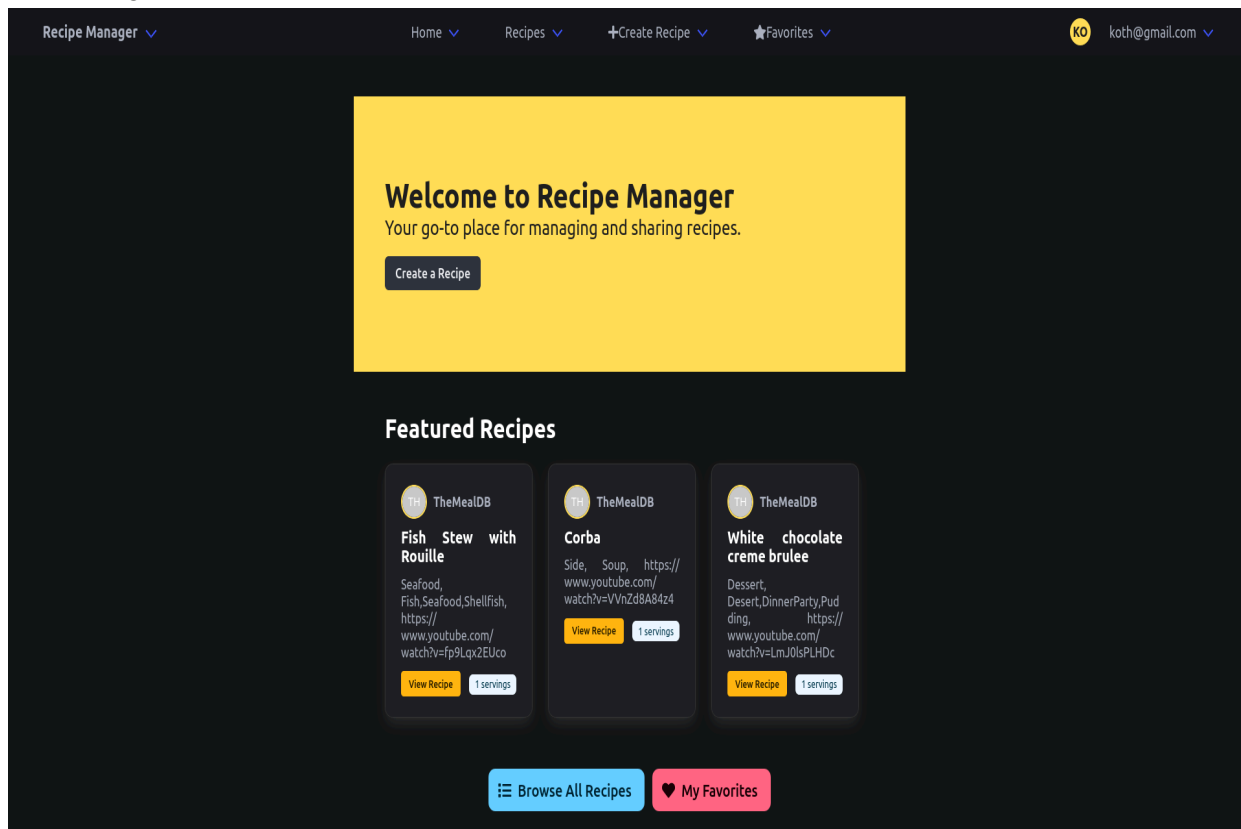
Garides Saganaki - Made by TheMealDB ⭐

TH Made by TheMealDB

Seafood, Seafood,Shellfish, https://www.youtube.com/watch?v=uO0ejc85zSE
Type: Greek   Servings: 1

Moussaka - Made by TheMealDB ⭐
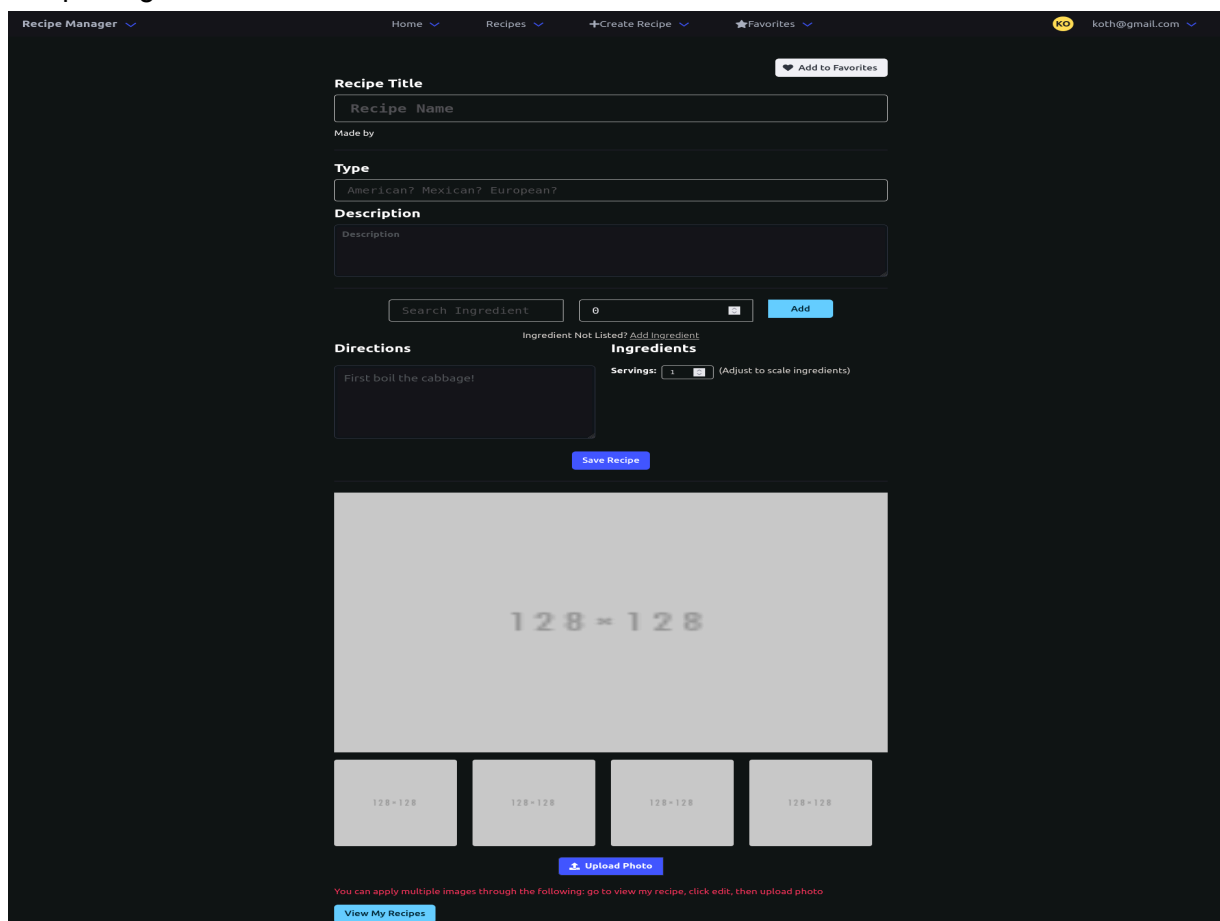
TH Made by TheMealDB

Beef, https://www.youtube.com/watch?v=8U_29i9Qp5U
Type: Greek   Servings: 1

Home Page

Recipe Page

Add ingredients to a recipe

| Water Chestnut | 1 | ⌄ | Add |

cold water

water

Water Chestnut

Orange Blossom Water

Rose water

Boiling Water

ngredient Not Listed? Add Ingredient

Directio

Ingredients

First bo

Servings: 1 ⌄ (Adjust to scale ingredients)

- Water Chestnut - Quantity: 1.00

Save Recipe

Add ingredients if they're not listed

Add Ingredient

Name

ex. sugar? spice?

Unit (g)

ex. 100

Calories per Unit (g)

ex. 31

Description

ex. 1. Bake the cake! 2. Eat

Cholesterol (mg)

ex. 170

Sodium (mg)
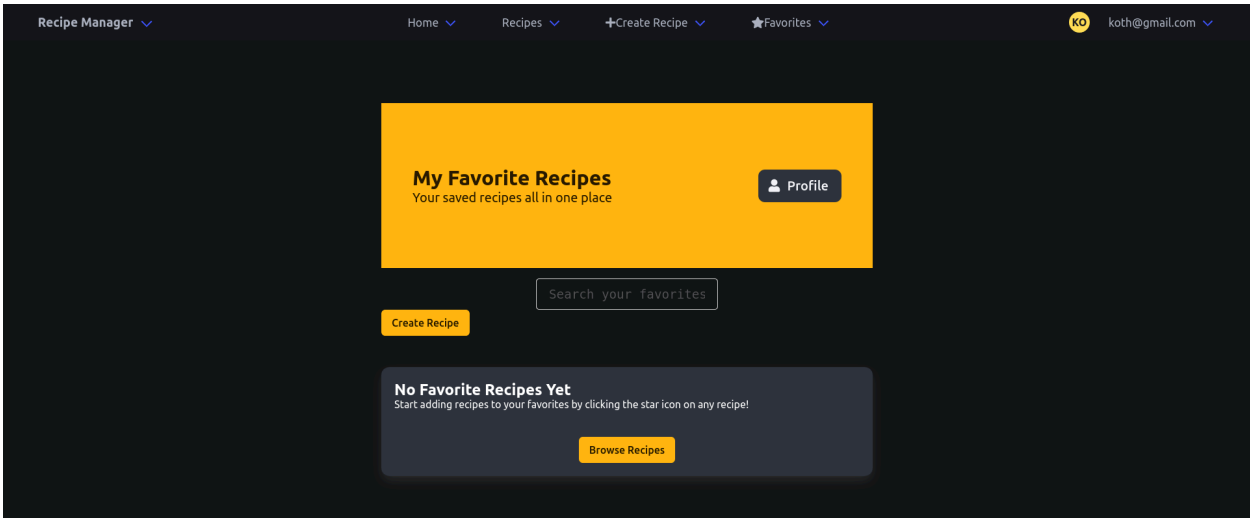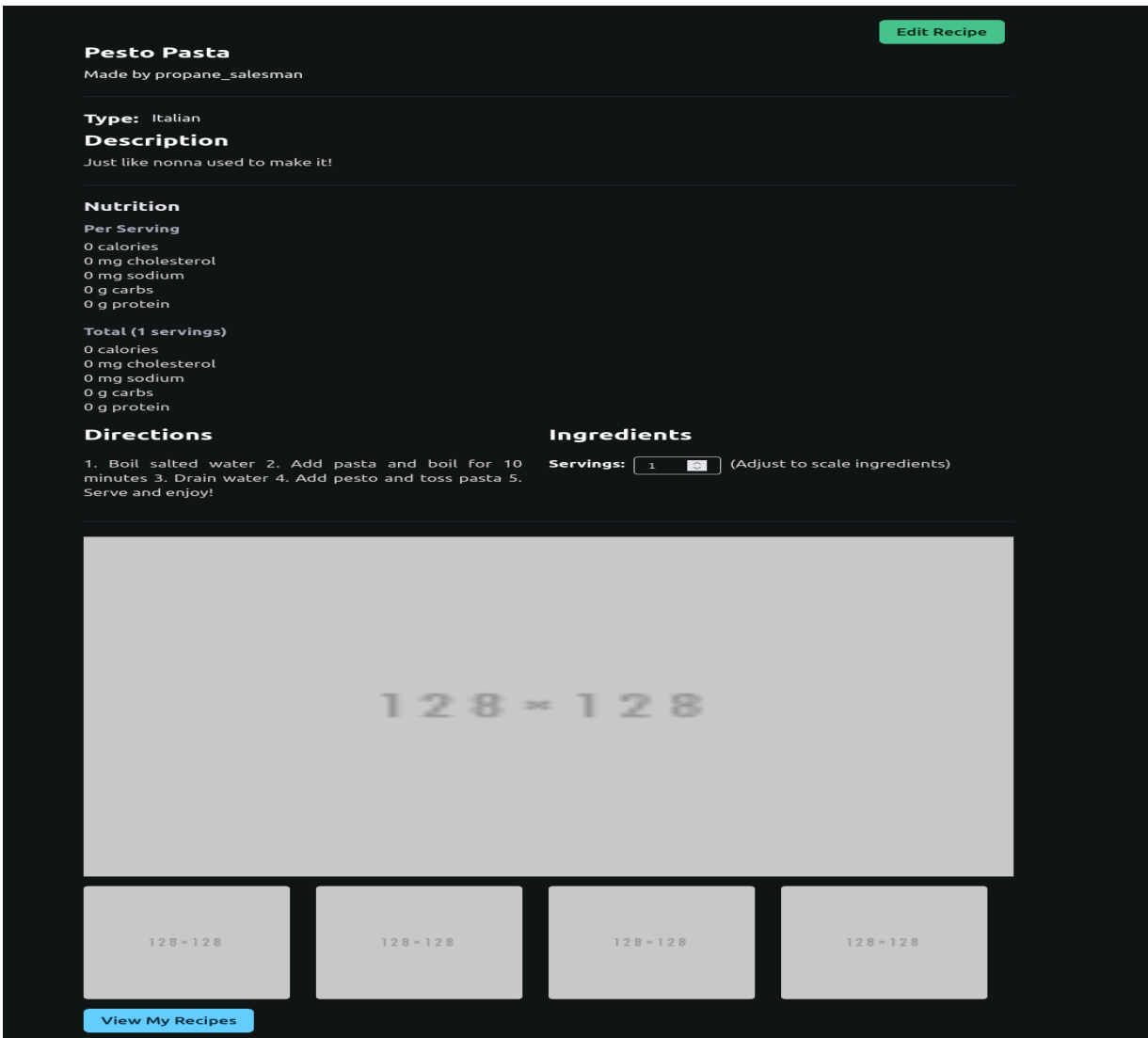
ex. 400

Total Carbohydrates (g)

ex. 23

Protein (g)

ex. 3

Add Ingredient

Favorites Page

My Favorite Recipes
Your saved recipes all in one place

👤 Profile

Search your favorites

Create Recipe

No Favorite Recipes Yet
Start adding recipes to your favorites by clicking the star icon on any recipe!

Browse Recipes

Edit Recipes

Edit Recipe

Pesto Pasta
Made by propane_salesman

Type: Italian
Description
Just like nonna used to make it!

Nutrition
Per Serving
0 calories
0 mg cholesterol
0 mg sodium
0 g carbs
0 g protein

Total (1 servings)
0 calories
0 mg cholesterol
0 mg sodium
0 g carbs
0 g protein

Directions

1. Boil salted water 2. Add pasta and boil for 10 minutes 3. Drain water 4. Add pesto and toss pasta 5. Serve and enjoy!

Ingredients

Servings: 1 ⟳ (Adjust to scale ingredients)

128×128

128×128   128×128   128×128   128×128

View My Recipes

Profile

User Profile
Manage your profile information

Profile Information

Edit Profile

Display Name

Hank Hill

Email

koth@gmail.com

Email cannot be changed here. Use 'Edit Profile' in the menu.

Bio

I sell propane and propane accessories

Your Recipe Statistics
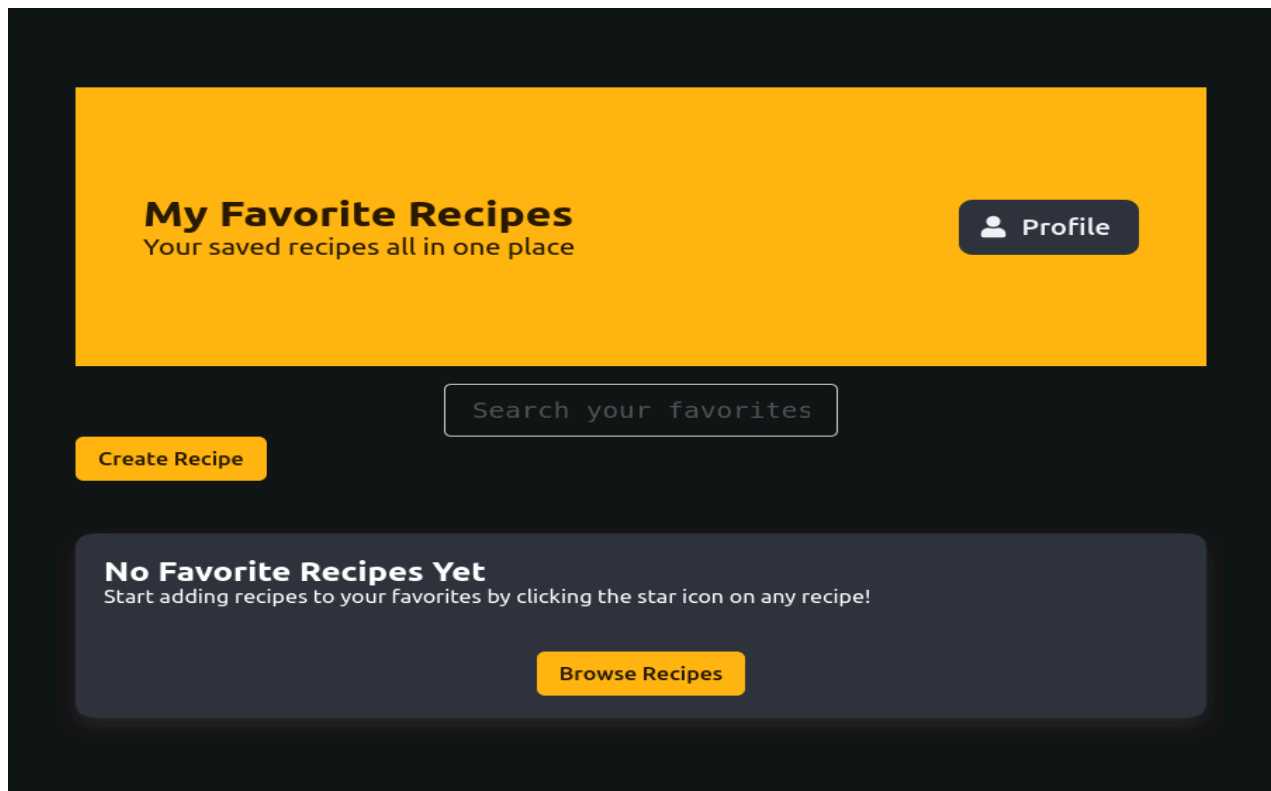
1
Recipes Created

0
Favorites

0
Reviews

Favorites

Click the star to set add a recipe to your favorites