RECIPIES

🕐 Created	@May 23, 2025 5:46 PM
🏷 Tags	

Create a venv

Backend:

MySQL setup:

db name: recipe_db

Database:

```
mysql> DESCRIBE recipes;
+-------------+--------------+------+-----+---------+----------------+
| Field       | Type         | Null | Key | Default | Extra          |
+-------------+--------------+------+-----+---------+----------------+
| id          | int          | NO   | PRI | NULL    | auto_increment |
| cuisine     | varchar(255) | YES  |     | NULL    |                |
| title       | varchar(255) | YES  |     | NULL    |                |
| rating      | float        | YES  |     | NULL    |                |
| prep_time   | int          | YES  |     | NULL    |                |
| cook_time   | int          | YES  |     | NULL    |                |
| total_time  | int          | YES  |     | NULL    |                |
| description | text         | YES  |     | NULL    |                |
| nutrients   | json         | YES  |     | NULL    |                |
| serves      | varchar(255) | YES  |     | NULL    |                |
+-------------+--------------+------+-----+---------+----------------+
10 rows in set (0.04 sec)
```
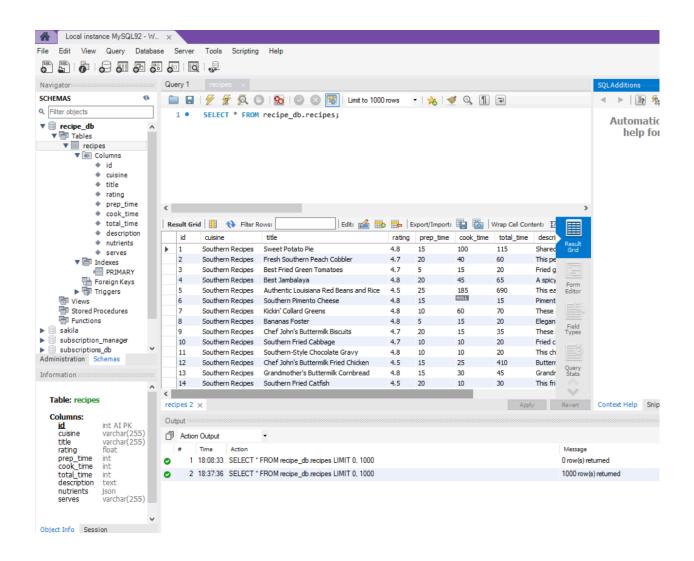
Data Preprocessing:

under data folder

- takes recipe.json as input preprocesses data as said and according to the data and stores them a new json file: "clean_recipe.json"

- Python file: preprocess.py

```
backend > data > {} clean_recipes.json > ...
  1    [
  2    {
  3      "id": 1,
  4      "cuisine": "Southern Recipes",
  5      "title": "Sweet Potato Pie",
  6      "rating": 4.8,
  7      "prep_time": 15,
  8      "cook_time": 100,
  9      "total_time": 115,
 10      "description": "Shared from a Southern recipe, this homemade sweet potato pie is easy to make with boiled sweet potato. Try it
 11      "nutrients": {
 12        "calories": 389.0,
 13        "carbohydrateContent": 48.0,
 14        "cholesterolContent": 78.0,
 15        "fiberContent": 3.0,
 16        "proteinContent": 5.0,
 17        "saturatedFatContent": 10.0,
 18        "sodiumContent": 254.0,
 19        "sugarContent": 28.0,
 20        "fatContent": 21.0,
 21        "unsaturatedFatContent": 0.0
 22      },
 23      "serves": "8 servings"
 24    },
 25    {
 26      "id": 2,
```

Loading data to database:

- use mysql-connector-python to connect to mysql database and store the contents in the database.

- python file: database.py

- data successfully updated my sql

API TESTING: (2 API endpoints)

Basic API endpoint:

1. Paginated and sorted display

2. Search based on various fields

3. Implemented pagination for search api

TO RUN:

preprocess.py → once to create a cleaned json file

data - folder

python preprocess.py

databse.py → to load the cleaned input to the MySQL database

python database.py

main.py → Define API endpoints to display the data from the DB

uvicorn main:app —reload

API ENDPOINT 1 : http://127.0.0.1:8000/api/recipes?page=2&limit=20

(Page and limit, sorted based on the rating)

API ENDPOINT 2: http://127.0.0.1:8000/api/recipes/search?calories=<=400&title=pie&rating⇒=4.5

(Search based on the various fields)

FRONTEND:

React+Vite:

```
npm create vite@latest recipe-frontend --template react
cd recipe-frontend
npm install
npm install axios
```


FRONTEND AND BACKEND CONNECTED using CORS:

MIddleware:

```
app.add_middleware(
    CORSMiddleware,
    allow_origins=["http://localhost:5173"],  # Frontend Vite dev server
```

```
    allow_credentials=True,
    allow_methods=["*"],
    allow_headers=["*"],
)
```

Vite Config file:

```
import { defineConfig } from "vite";
import react from "@vitejs/plugin-react";

export default defineConfig({
  plugins: [react()],
  server: {
    proxy: {
      // Proxy /api requests to your backend server
      "/api": {
        target: "http://127.0.0.1:8000", // change to your backend URL and port
        changeOrigin: true,
        secure: false,
      },
    },
  },
});
```

RECIPE TABLE PAGE:

RECIPE TABLE

Title	Cuisine	Rating	Total time	No. of people Serves
Healthier Amish Friendship Bread Starter	Amish and Mennonite Recipes	★★★★★	13000	120 servings
Amish Blackberry and Strawberry Baked Oatmeal	Amish and Mennonite Recipes	★★★★★	40	12 servings
Cajun Pastalaya	Cajun and Creole Recipes	★★★★★	90	8 servings
Green Chile Chicken Casserole	Tex-Mex Recipes	★★★★★	55	8 servings
Sopa de Mariscos (Seafood Soup)	Tex-Mex Recipes	★★★★★	95	10 servings
Mexican Black Bean and Turkey Wraps	Tex-Mex Recipes	★★★★★	45	4 servings
Amish Buttermilk Biscuits	Amish and Mennonite Recipes	★★★★★	25	7 servings
Amish Apple Dumplings	Amish and Mennonite Recipes	★★★★★	65	6 servings
Air Fryer Turkey Fajitas	Tex-Mex Recipes	★★★★★	50	4 servings
Amish Baked Oatmeal	Amish and Mennonite Recipes	★★★★★	35	8 servings
Authentic Fire-Roasted Tex-Mex Salsa	Tex-Mex Recipes	★★★★★	20	8 servings
Burrito Casserole	Tex-Mex Recipes	★★★★★	50	12 servings
Karen's Red Hot Campfire Potatoes	New Hampshire	★★★★★	60	6 servings
Bean-Hole Beans	Maine	★★★★★	790	30 servings

Title	Cuisine	Rating	
Cajun Pastalaya	Cajun and Creole Recipes	★★★★★	9
Green Chile Chicken Casserole	Tex-Mex Recipes	★★★★★	5
Sopa de Mariscos (Seafood Soup)	Tex-Mex Recipes	★★★★★	9
Mexican Black Bean and Turkey Wraps	Tex-Mex Recipes	★★★★★	4
Amish Buttermilk Biscuits	Amish and Mennonite Recipes	★★★★★	2
Amish Apple Dumplings	Amish and Mennonite Recipes	★★★★★	6
Air Fryer Turkey Fajitas	Tex-Mex Recipes	★★★★★	5
Amish Baked Oatmeal	Amish and Mennonite Recipes	★★★★★	3
Authentic Fire-Roasted Tex-Mex Salsa	Tex-Mex Recipes	★★★★★	2
Burrito Casserole	Tex-Mex Recipes	★★★★★	5
Karen's Red Hot Campfire Potatoes	New Hampshire	★★★★★	6
Bean-Hole Beans	Maine	★★★★★	79
Air Fryer Tofu Milanesa	Tex-Mex Recipes	★★★★★	3
Holiday Coffee Liquor	New Hampshire	★★★★★	3
Easy Chili Cavatappi	Tex-Mex Recipes	★★★★★	4
Tex-Mex Air Fryer Hash Browns	Tex-Mex Recipes	★★★★★	6
Bean-Hole Beans	New England Recipes	★★★★★	79
Harvest Noodle Pudding - Fruit Kugel	Hanukkah Kugel	★★★★★	12
Vegetable and Farfel Kugel	Hanukkah Kugel	★★★★★	7

Amish Baked Oatmeal
Amish and Mennonite Recipes

Description:

This recipe for Amish baked oatmeal combines simple ingredients for a warm, filling breakfast that's best served with peaches and milk.

Total Time: 35 ▶

Nutrition:

Calories	375
Carbohydrate	50
Cholesterol	49
Fiber	3
Protein	7
Saturated Fat	3
Sodium	452
Sugar	29
Fat	18

Cajun Pastalaya	Cajun and Creole Recipes	★★★★★	9
Green Chile Chicken Casserole	Tex-Mex Recipes	★★★★★	5
Sopa de Mariscos (Seafood Soup)	Tex-Mex Recipes	★★★★★	9
Mexican Black Bean and Turkey Wraps	Tex-Mex Recipes	★★★★★	4
Amish Buttermilk Biscuits	Amish and Mennonite Recipes	★★★★★	2
Amish Apple Dumplings	Amish and Mennonite Recipes	★★★★★	6
Air Fryer Turkey Fajitas	Tex-Mex Recipes	★★★★★	5
Amish Baked Oatmeal	Amish and Mennonite Recipes	★★★★★	3
Authentic Fire-Roasted Tex-Mex Salsa	Tex-Mex Recipes	★★★★★	2
Burrito Casserole	Tex-Mex Recipes	★★★★★	5
Karen's Red Hot Campfire Potatoes	New Hampshire	★★★★★	6
Bean-Hole Beans	Maine	★★★★★	79
Air Fryer Tofu Milanesa	Tex-Mex Recipes	★★★★★	3
Holiday Coffee Liquor	New Hampshire	★★★★★	3
Easy Chili Cavatappi	Tex-Mex Recipes	★★★★★	4
Tex-Mex Air Fryer Hash Browns	Tex-Mex Recipes	★★★★★	6
Bean-Hole Beans	New England Recipes	★★★★★	79
Harvest Noodle Pudding - Fruit Kugel	Hanukkah Kugel	★★★★★	12
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  Cook Time: 25
  Prep Time: 10

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Saturated Fat	3
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Fat	18

Customizable page limit:

RECIPE TABLE

Results per page: 25 ▾

Title	Cuisine	Rating	Total time	No. of people Serves
Sweet Noodle Kugel	Hanukkah Kugel	★★★★★	65	8 servings
Kneecaps	Hanukkah Doughnuts	★★★★★	180	120 servings
Erin's Canadian Fried Dough	Hanukkah Doughnuts	★★★★★	150	10 servings
Family Latkes	Hanukkah Latkes	★★★★★	80	12 servings
Pumpkin Sufganiot with Cranberry Jelly	Hanukkah Doughnuts	★★★★★	375	18 servings
Natalie Powell's Knishes	Hanukkah Appetizers	★★★★★	80	25 servings
Charoset	Seder Side Dishes	★★★★★	495	10 servings
Passover Double Chocolate Almond Torte	Dairy Desserts	★★★★★	60	10 servings
Pumpkin Sufganiot with Cranberry Jelly	Dairy Bread	★★★★★	375	18 servings
Charoses	Parve Desserts	★★★★★	15	5 servings
Watermelon Strawberry Mango Lemonade Smoothie	Strawberry Smoothies	★★★★★	5	4 servings
Fat-Free Vanilla Coffee Creamer	Coffee Drinks	★★★★★	35	10 servings
Hot Buttered Rum Single Serving	Coffee Drinks	★★★★★	10	1 serving
Cold Brew and Tonic	Coffee Drinks	★★★★★	5	1 serving
Backyard Berry Bowl	Strawberry Smoothies	★★★★★	10	2 servings

Search Feature Integration:

RECIPE TABLE

Title					Search	Clear

Results per page: 15

Title	Cuisine	Rating	Total time	No. of people Serves
Peach Crumble Cake	Peach Crisps and Crumbles	★★★☆☆	40	6 servings
Southern Peach Shortcake	Peach Cake	★★★☆☆	60	8 servings
Fresh Fruit Cake	Peach Cake	★★★☆☆	100	12 servings
Peaches 'n Cream Shortcake	Peach Cake	★★★☆☆	75	4 servings
Sugar Pie IV	Chess Pie	★★★☆☆	60	10 servings
Baked Chicken and Okra	Southern Chicken Main Dishes	★★★☆☆	130	10 servings
Shrimp Gumbo	Gumbo	★★★☆☆	70	6 servings
Crissi's Sweet Potato Biscuits	Southern Bread	★★★☆☆	40	6 servings
Turnip, Mustard, and Collard Greens with Bacon	Collard Greens Recipes	★★★☆☆	220	12 servings
Crissi's Sweet Potato Biscuits	Southern Breakfast and Brunch	★★★☆☆	40	6 servings
Crispy Fried Poached Eggs	Southern Breakfast and Brunch	★★★☆☆	27	4 servings
Crispy Fried Poached Eggs	Breakfast and Brunch	★★★☆☆	27	4 servings
Air Fryer Churros	Doughnuts	★★★☆☆	25	6 servings
Cheesecake Factory Banana Cheesecake with Home…	Banana Cake	★★★☆☆	415	8 servings