Python Project "Recipe"

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1 Introduction

This was a school project made two years ago. With a given database *(the one called "recettes.sqlite")* and a given package *("agro_GUI", made from tkinter package by one of our IT teachers)* we had to create a graphical user interface. We were free to change a bit the database if needed.

2 The database

The database structure was initially as shown on Figure1. It contains 5 tables :

client : which gather information on clients such as their id (primary key), their first and last name and their email address. I added a column password with default value 'abc' to this table.

plat : which contains information about recipes like name, id, instructions, image file name, difficulty, number of servings...

consommation : each line correspond to a consumption of recipe by a client. Therefore it contains the id of the recipe consummed, the id of the client who consummed it, how many servings were consummed and at which date.

ingredient : which contains ingredients id, names and nutritional values per reference unit. I added a boolean column called Vegetarien which was supposed to take value TRUE if the ingredient is vegetarian.

composition : which is used to know which ingredients a given recipe contains. Each line contains a recipe id, an ingredient id, a quantity and a reference unit.
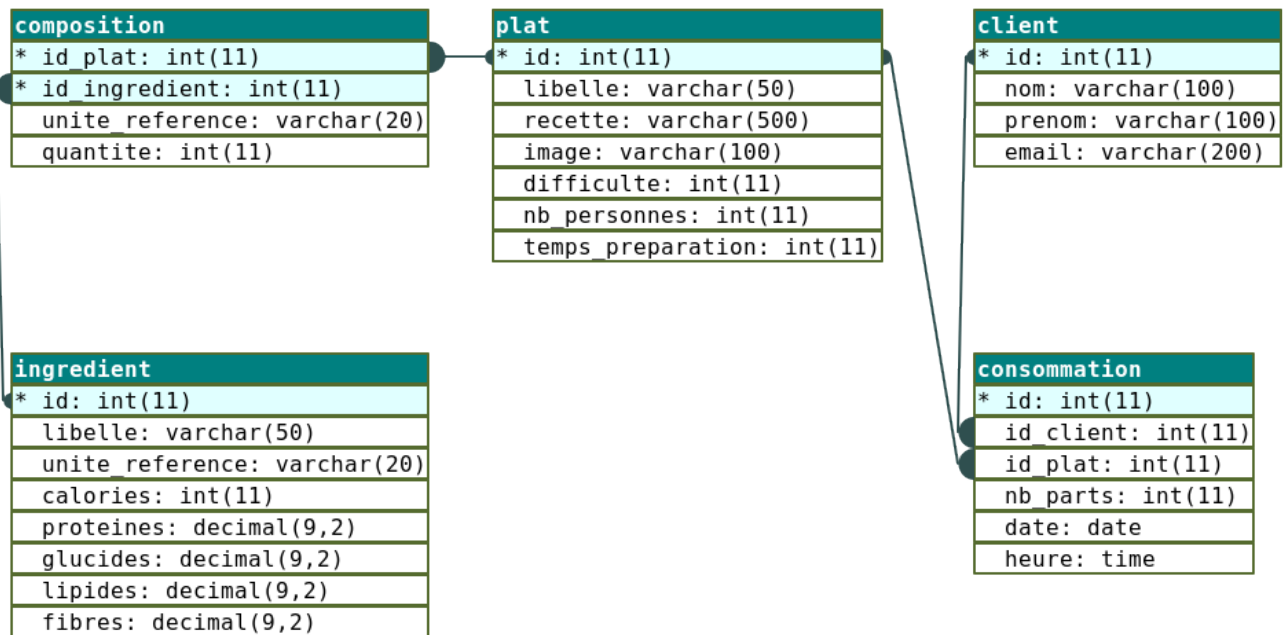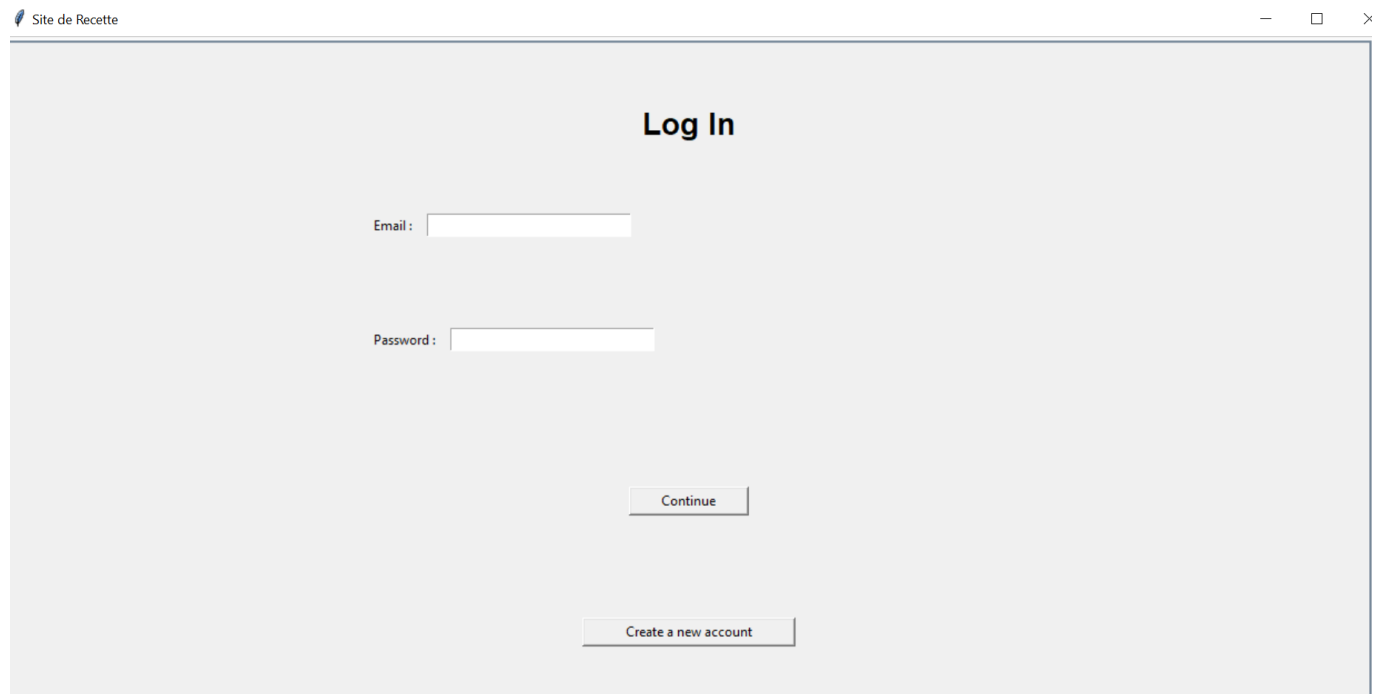
Figure 1: Database structure

Structure of my Python code

Some functions are used to update the frame of the graphical user interface, they are all gathered in the file "gui.py" and their name always start by "page_" .
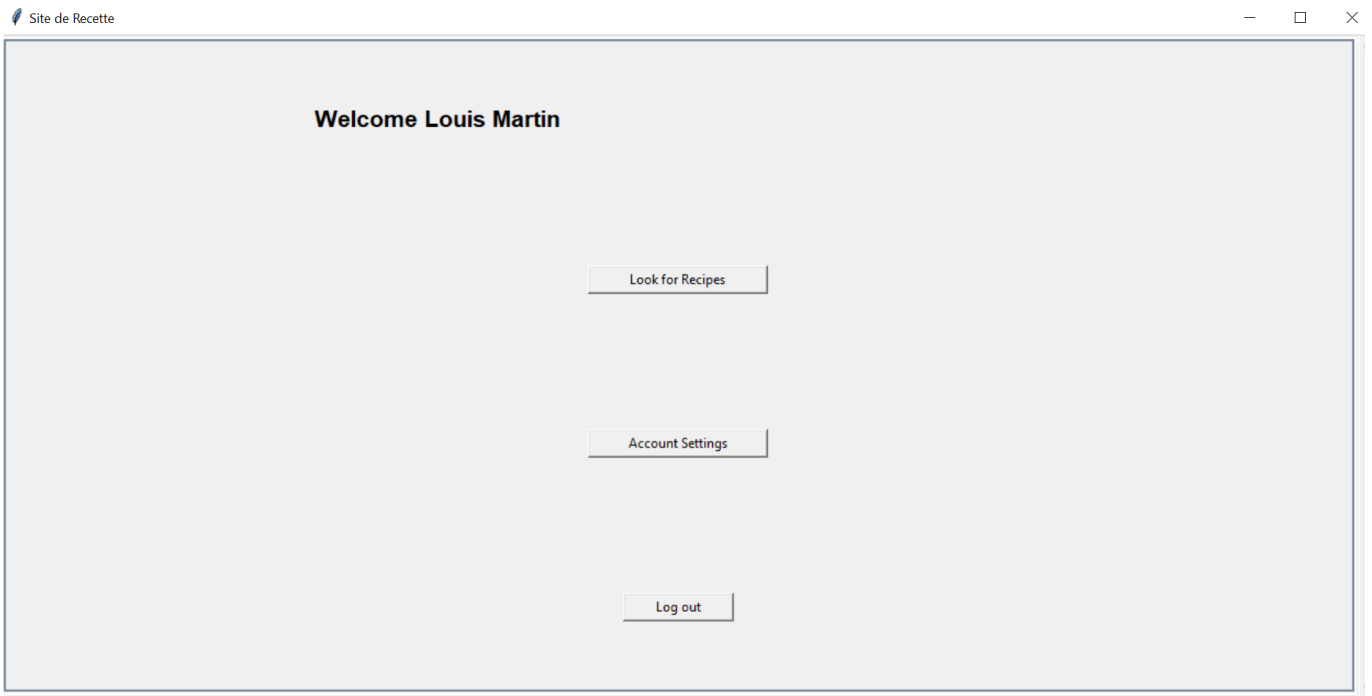Other functions(for instance the one used to add information to the database or extract information from it are gathered in the file "functions.py".

Graphical User Interface

The first function to be called is "page_connexion" so the client arrive to a frame where he can create a new account or log in with it's email and password.

If he gives a couple (email, password) existing in database he can access a Home Page and choose to look for recipes, update its account information or log out. For instance, when user with id=2 *(called Louis Martin)* just logged the Home Page looks like that :

Welcome Louis Martin

Look for Recipes

Account Settings

Log out

If the client decide to look for recipes, he ends up to the following page where he can research recipes by key words and by the ingredients they contains. He can also use the check box "Vegetarian" if he wants all the results to be only vegetarian recipes.

If he clicks on "Search", the frame show a listbox of all the recipe names that match the search. He can decide to go back to other pages or select one (only one recipe) and see the recipe instruction page by clicking on a button. He then ends up on a page that looks like that :

Gateau au chocolat

- Difficulty : 3
- Servings : 6
- Time : 40

Ingrédients :

Ingredient	Quantity	Reference Unit
Farine de ble	0.5	100g
Oeuf	3	1 oeuf
Sucre blanc	1	100g
Beurre	1	100g
Chocolat à cuisiner	2	100g

Faites fondre le chocolat et le beurre, ajoutez le sucre les oeufs et la farine. Melangez. Ajoutez le melange chocolat et beurre. Beurrez et farinez votre moule puis y versez la pate. Faites cuire au four environ 20 minutes à 180

Back to Home page

Add to my consumption

From Home Page, a client can all see all its consumption. Example with client id 117 :

My consumptions

Recipe	Number of servings	Date	Time
Salade nicoise	1	2017-03-10	12:0:00
Salade nicoise	1	2017-03-12	12:0:00
Gateau au chocolat	2	2017-03-13	17:0:00
Gateau au chocolat	1	2017-03-13	8:0:00
Gateau au chocolat	1	2017-03-14	14:0:00

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