

## Workings of Yummly3.0

The Yummly3.0 program is executed in a python environment, with which the user interacts via `input()` functions.

The program comes together in the `main.py` file which taps into the other necessary function. Upon executing the latter file the user is required to sign in or sign up. Following this choice a new user is either saved into the database or the username and password are compared to a hashed record stored in the database. Hereby the `main.py` script directly communicates with the data access object [DAO].

Following this first interaction, the user is offered a choice of options which shall be discussed hereafter. The concept of each request is always a similar one. Thus the user chooses an option, if the latter requires further input the main file requests this. The obtained information are then used by one of the API controllers which requests the API and returns the information which are saved as object using one of the blueprints provided by the Models file. In a next optional step, the data is saved to the users profile in the MySQL database through the functions provided in one of the helper files which are accessed through the `master_helpers.py` file.

Please enter the number of one of the following options:

1. Search a new recipe using pictures
  2. Search recipes by name
  3. Get all your recipes
- 'info' to get information on all options
- 'exit' to end the program

### 1. Search a new recipe using pictures

This option uses pictures stored locally in a folder. The path is provided by the user whereafter the images are encoded and through use of the Google Vision API the ingredients shown on the pictures are recognized and used as input for the Spoonacular API which returns a list of possible recipes to the user. The user can select to see explicit instructions about the recipe and thereafter decide to store it in the database.

### 2. Search recipes by name

Here the user may search a recipe through an input string, which will be sent to the Spoonacular API and returns once again a list of recipes. Once again the user can select to see more details and save the inspected recipe.

### 3. Get all your recipes

This functionality taps into the database to obtain all recipes saved to the users profile. The recipes can again be inspected.

**'info' to get information on all options**

The 'info' option allows you to obtain more information about the different functionalities of the program.

**'exit' to end the program**

'exit' allows you to stop the `main.py` file process by exiting the while loop.