COL362: Application Project Milestone 3

Vishwas Kalani
2020CS10411

Aman Bansal
2020CS10319

Nischay Diwan
2020CS50433

April 2023

Contents

1 Set up for running project

We have made our web application using **django**. The steps to be followed for setting up django are as follow :

1. Configure and install **python3**

2. Configure and install **postgresql12**

3. Creating a virtual environment and setting up django :

   - Navigate to the directory where you want to build the application
   - *mkdir django-projects*
   - *cd django-projects*
   - *python3 -m venv env*
   - *. env/bin/activate*
   - Now we need to install django within the environment : *pip install django*
   - One more library need to be installed for running postgresql wiht django : *pip install psycopg2-binary*
   - Now our submission can be downloaded and run within the activated environment. For running the submission, enter the directory with **run.sh** and run the bash script.

2 Application front end design

We have used basic **html** and **css** templates for our front end design. We have our templates in the following directory :

- Main project directory (where there is bash script)
- Application 1 : **testdb** which contains most of our main functions contain many templates for our webpages.
- Application 2 : **accounts** for support for login and signup conatains their templates.

A glimpse of our front end :

Figure 1: Trending page

3 Supported transactions

Our web application supports the following transactions :

1. Logging in the portal with your **username** and signing up with a **username** not used before. After this step we enter the home page for a user where we can see the features written below.

2. Displaying profile of the user by querying from the *user_data* table.

3. Giving options to the user to update their details like *update city*, *update phonenumber* etc.

4. Displaying 3 scores of users on his **dashboard** : number of tracked meals, user score and average number of meals per day.

5. Giving option to **add a meal** to the user to record any instance of himself/herself eating a meal.

6. Showing option of **detailed statistics** to the user to check out the distribution of his meals among various types of meals till now.

7. Showing option to check out the **trending page** which shows the result of 4 queries : trending restaurant, dishes, meal types and cuisines.

8. By clicking on the restaurant name we can find all the details of the restaurant. On the page of restaurant, we get an option to checkout the **menu** of the restaurant and to **rate the restaurant**.

9. Adjacent to every dish in the restaurant's menu, we give an option to **track** a food item. In real life scenario this option corresponds to giving the link to order the food item. Clicking this button, adds the meal as **tracked meal** to the meal table.

10. further we give an option to users to enter their latitude and longitude and checkout the **closest restaurants to them**.

11. We give option to user to perform three type of searches :

    - **Search food items** by their attributes like cuisine cuisine, meal type, vegetarian or non vegetarian, nutritious values etc.
    - **Search restaurants** by their attributes like city, price, rating etc.
    - **Search restaurants based on conditions on food** items in them as well conditions on the restaurants.

12. Option to **add a restaurant**. We try to **toy a verification scenario**, we ask the user to enter a number (similar to asking a document for verification) and then check if the number is prime. If it is prime, we add the restaurant otherwise verification failed.

13. Logging out of the portal

---

4 Overall architecture and how the web application is linked

The following diagram shows how various web pages on our application are connected :
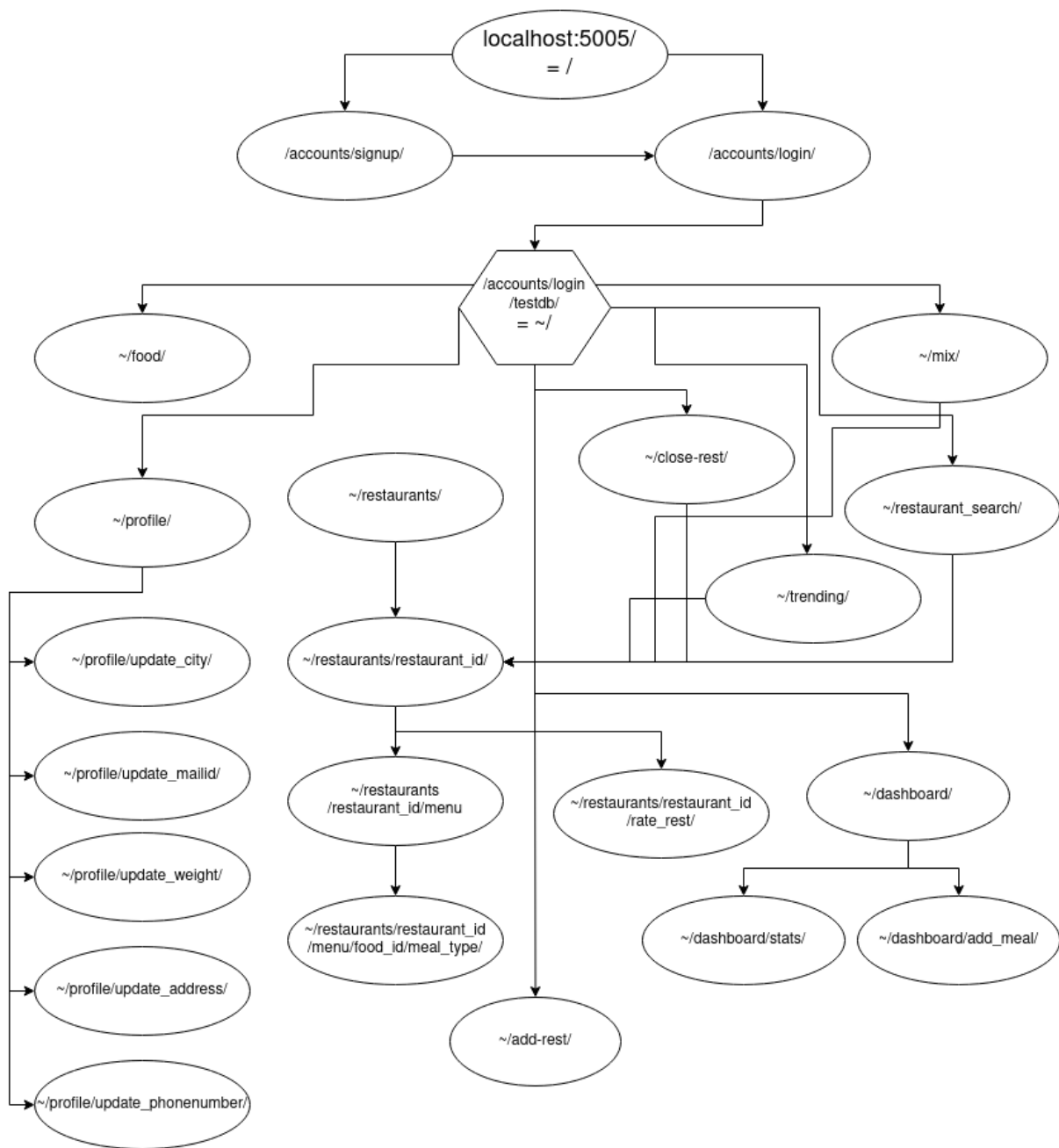

Figure 2: Site architecture

5 Demonstration scenario

We can provide a sample **Username** and **password** for logging in and checking out our site using an existing user. Other option is to sign up but in this case you will be able to use features of our website but will not truly enjoy the stats that have been built for existing users. We show a feature of our website below and there are more features which we will be showing in demo.

1. **Sample user name :** Vis1

2. **Sample password :** hehe1234
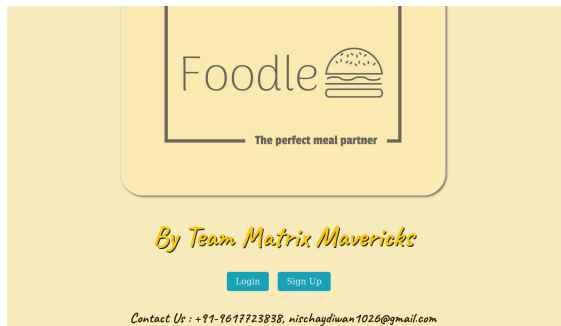
Figure 3: Site home
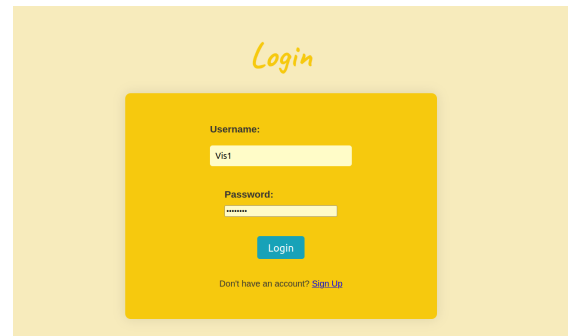
Figure 4: User login

Figure 5: User home

Figure 6: Trending section
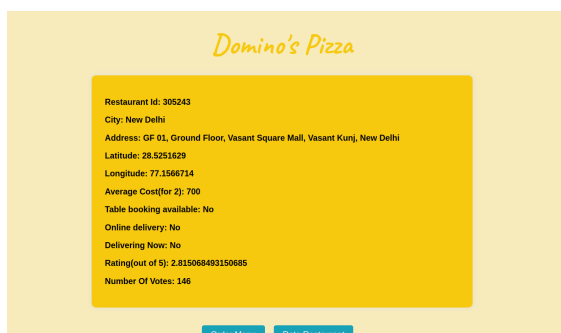
Figure 7: Enter a restaurant's page

Figure 8: Enter its menu