Project Report for Final Project

Modern Application Development - I

Author

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I am a college student currently pursuing an offline degree with the IITM B.S. online degree. I have learned a lot while developing this application.

Description

In this project, we were supposed to use HTML, CSS, bootstrap, flask, restful APIs, SQLAlchemy, and other necessary modules to build an app for Household services. We had to build a login/signup page where we can store the usernames and passwords of people who have visited this app. There are 3 types of users-

1) Admin:
    - There is only one admin (the one who control all the functionalities).
    - He /She can create/update/delete services.
    - Accept professionals based on their identification/resume.
    - Blacklist any user based on their ratings or fraud activities.
    - Review all users/services page and all the requests.
2) Professional:
    - Professional has a different signup where they need to upload identification proof.
    - They can only choose one service available.
    - They can accept/reject user requests.
3) Users(customers):
    - They are the ones that use services.
    - They can search for any service and book them.
    - They can close the service request after it is completed and give remarks or ratings.

Technologies used

Flask, Flask-SQLAlchemy, Flask-RESTful and other libraries.

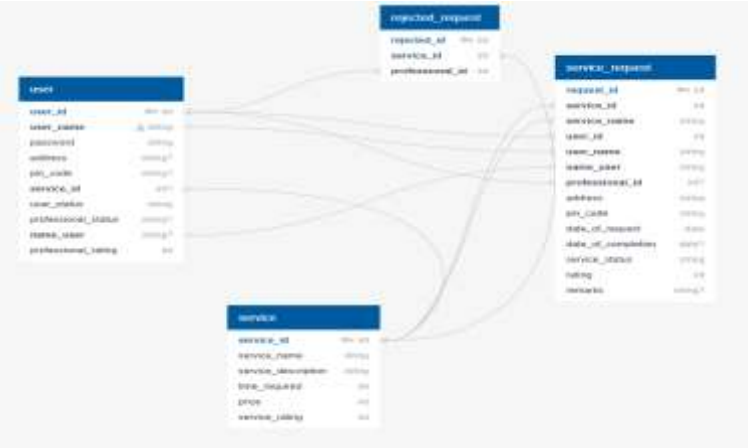
DB Schema Design

Relation: One user can have multiple “service_request” but one request will have only one user which is an one to many relationship.

Likewise one professional user accept multiple “service_request” but one request will only have one professional assigned which is also a one to many relationship.

One service can have multiple “service_request” but one request will have only one service.

“rejected_request” table contains the professional id and service id of the service rejected by the professional.



API Design

1) Admin functionality(only admin can access)

- getservice : Implemented using get, post, put, and delete methods.
- getusers : Implemented using get and delete.
- getrequest : Implemented using get method to retrieve all the requests taking place.
- getblacklisted : Implemented using get to get all blacklisted users, post to block all users, put to unblock all users and delete to delete all blacklisted users.
- search_user : Implemented using get to get the details of the user by user_id, delete to delete the user by user_id

2) Professional(only professional can access)

- accept_request : Implemented using get to retrieve all the details of a service_request meant for the particular professionals, post to accept all the requests, delete to reject all requests.

3)Customers(only customers can access)

- userservice : Implemented using get to retrieve all the service user can book, post to book a service using service id.

Architecture

The project code is organized based on its utility in different files. I named my project MAD1project . Inside “MAD1project” folder there are 2 python files and some folders-

1) app.py

2) init.py

3) _psyche_

4) static: Contains all the image, pdf, css files.

5) backend : Contains all the backend files like controllers.py, config.py, models.py etc

6)instance: Contains the database

7)templates : Contains all the templates

8) readme file

Video: https://drive.google.com/file/d/1KSBSXee9nJ495VNn5Cvbrp7bXFebLTm5/view?usp=sharing