

A TO Z HOUSEHOLD SERVICES

FREEHANDS

Project by

DHIRAJKUMAR PACHLING

23F1002092

MODERN APPLICATION DEVELOPMENT – 1

SEPTEMBER, 2024 Term

STUDENT DETAILS :-

Name : DHIRAJKUMAR PACHLING

Roll no : 23f1002092

E-mail : 23f1002092@ds.study.iitm.ac.in

About me : I am focused on creating a smooth and efficient user experience, with attention to detail in my application's design and functionality. I prefer keeping things streamlined, such as limiting stored data and removing unnecessary features. I value clarity and simplicity in both code and interface design.

PROJECT DESCRIPTION :-

FreeHands is a platform that connects customers with professionals for various services, allowing users to easily browse, request, and track services. Customers can view details and reviews, while professionals manage their service requests and availability. The platform focuses on simplicity and efficiency, providing a smooth experience for both customers and professionals. With its clear design and user-friendly interface, freeHands aims to improve the way services are accessed and provided.

HOW I APPROACHED THE PROBLEM STATEMENT :-

Having prior knowledge of Flask and SQLAlchemy from MAD-1 and instructor sessions, I started by creating the models to store the database. Then, I developed the login and registration pages for both service professionals and customers, ensuring proper routing and template rendering.

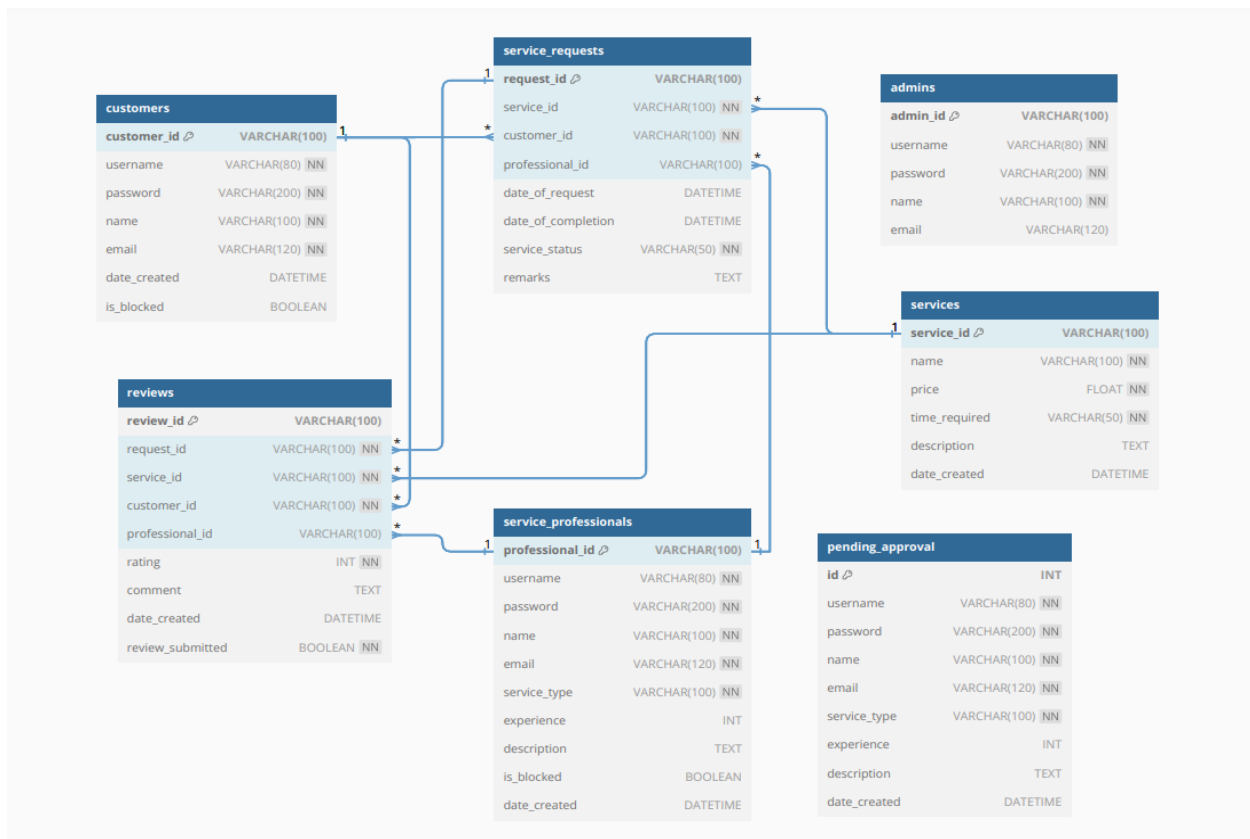
After setting up the basic structure, I focused on developing the core functionalities outlined in the problem statement. Although I encountered several errors along the way, I was able to troubleshoot and resolve them, ultimately building a smooth and functional platform.

TECHNOLOGIES USED :-

1. **Flask**: Backend framework for building the web application.
2. **SQLAlchemy**: ORM (Object-Relational Mapping) tool for database interaction.
3. **SQLite**: Database management system for storing application data.
4. **HTML/CSS/Bootstrap**: Frontend technologies for user interface design and interactivity.
5. **Flask-Login**: Extension for managing user sessions and authentication.
6. **datetime**: Python library for handling date and time operations.
7. **Jinja2**: Template engine for rendering dynamic HTML content.
8. **Werkzeug**: Utility for securely managing passwords and authentication.

DB SCHEMA DESIGN :-

The **FreeHands** database schema consists of tables for **Admin**, **ServiceProfessional**, **Customer**, **Service**, **ServiceRequest**, **Review**, and **PendingApproval**. The schema manages user data, service information, requests, and reviews, with relationships between customers, professionals, and services. Each table is designed to handle specific aspects of the platform, such as authentication, service tracking, and reviews, ensuring efficient data management.



ROUTES :-

@app.route('/')

@app.route("/register", methods=['GET', 'POST'])

@app.route("/login", methods=['GET', 'POST'])

@app.route("/register_customer", methods=['GET', 'POST'])

@app.route("/register_service_professional", methods=['GET', 'POST'])

@app.route("/customer_login", methods=['GET', 'POST'])

@app.route("/login_service_professional", methods=['GET', 'POST'])

@app.route("/logout")

@app.route('/login_admin', methods=['GET', 'POST'])

@app.route('/admin_dashboard')

@app.route('/monitor_customers')

@app.route('/toggle_block/<string:customer_id>')

@app.route('/pending_approval_list')

```
@app.route('/view_professional_profile/<int:id>')
@app.route('/approve_professional/<int:id>')
@app.route('/reject_professional/<int:id>')
@app.route('/admin/view_professionals')
@app.route('/admin/toggle_block/<string:professional_id>', methods=['POST'])
@app.route('/admin/services', methods=['GET'])
@app.route('/admin/service/create', methods=['POST'])
@app.route('/admin/service/update/<string:service_id>', methods=['POST'])
@app.route('/admin/service/delete/<string:service_id>', methods=['POST'])
@app.route('/admin/service_requests')
@app.route('/admin/overview')
@app.route('/professional_dashboard')
@app.route('/professional/pending_requests')
@app.route('/professional/accept_request/<request_id>', methods=['POST'])
@app.route('/professional/reject_request/<request_id>', methods=['POST'])
@app.route('/professional/all_services')
@app.route('/professional_reviews')
@app.route('/professional_profile')
@app.route('/professional_overview')
@app.route('/customer_dashboard')
@app.route('/customer_dashboard/available_services')
@app.route('/request_service/<service_id>', methods=['POST'])
@app.route('/update_request/<string:request_id>', methods=['POST'])
@app.route('/cancel_request/<string:request_id>', methods=['POST'])
@app.route('/search_professional', methods=['GET', 'POST'])
@app.route('/view_professional_profile_customers/<string:professional_id>')
@app.route('/view_customer_requests')
@app.route('/complete_request/<string:request_id>', methods=['POST'])
@app.route('/review_services')
@app.route('/submit_review/<request_id>', methods=['POST'])
```

PROJECT EXPLANATION VIDEO :-

https://drive.google.com/file/d/16DTqYcK01CCPg2Mo8PXqS2GRwHVJgADa/view?usp=drive_link