

MAD-1 Project Report

Student Details

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Project Details

Question Statement

Develop a household services platform to connect customers with service professionals, managed by an admin. The application should allow admins to oversee user management, approve service professionals, and create or update service offerings. Customers will have the ability to book, modify, and review services, searching by location or service type. Service professionals can accept or reject service requests and update service status as completed. The platform will be built with Flask for backend functionality, Jinja2 and Bootstrap for front-end styling, and SQLite for data management.

Approach

The project was approached by first designing the backend structure using Flask, where routes were set up for user(customer and professional) and admin operations. Flask-SQLAlchemy was employed to manage the database, defining models and establishing one-to-many relationships for categories and products. Jinja templates were used for dynamic HTML rendering. The application's front-end features were designed for usability, ensuring easy navigation and functionality for users and admins.

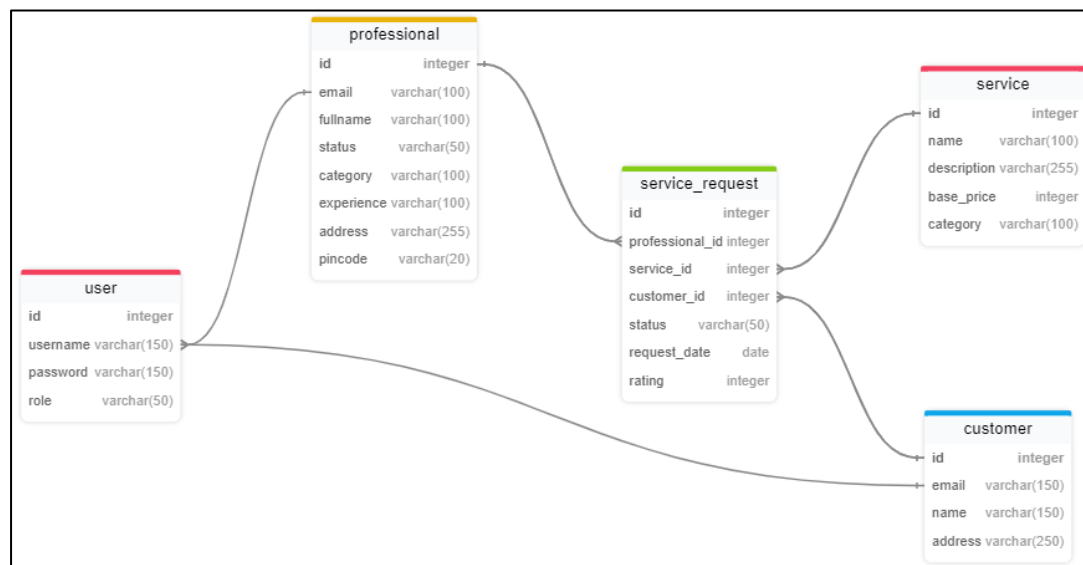
Implementation of program

- First Download the required python libraries which are flask , flask-sqlalchemy , flask-login , Jinja in your device.
- Then move to current directory in and run command “python app.py”
- And open url: <http://127.0.0.1:5000/>

Frameworks and Libraries Used

- Flask - Request handling, rendering templates, defining views/routes.
- Flask-SQLAlchemy - Database modeling and operations, managing queries, committing changes.
- Flask-Login
- Jinja - HTML templating for rendering dynamic content.
- SQLite - Lightweight database for storage and data management.

Database Schema Design (ER diagram)



API Resource Endpoints

User Sign in and Sign up

- Home or Start: / – Home route, redirects to the login page.
- Customer signup: /customer_signup – Endpoint for customer signup (handles GET and POST requests).
- Professional signup: /professional_signup – Endpoint for service professional signup (handles GET and POST requests).
- Login: /login – Endpoint for user login (handles GET and POST requests for customer, professional, and admin).

Admin Endpoints

- Admin Dashboard: /admin/dashboard (GET) - View an overview of categories and products.
- Add Category: /admin/category/add (POST) - Create a new category.
- Edit Category: /admin/category/edit/<cid> (PUT) - Update category details.
- Delete Category: /admin/category/delete/<cid> (DELETE) - Delete a category, moving associated products to "miscellaneous."
- Add Product: /admin/product/add (POST) - Add a new product under a specific category.
- Edit Product: /admin/product/edit/<pid> (PUT) - Update product details.
- Delete Product: /admin/product/delete/<pid> (DELETE) - Remove a product from the database.

Professional Endpoints

- Professional Dashboard: /professional-dashboard (GET) - View the dashboard with pending, completed, and rejected service requests.
- Search Service Requests: /professional-dashboard/search (GET) - Search for service requests based on service name or customer details.
- Professional Summary: /professional-dashboard/summary (GET) - View the professional's summary, including ratings and service request statistics.
- Accept Service Request: /professional/accept-service/<int:service_id> (POST) - Accept a pending service request.

- Complete Service Request: /professional/complete-service/<int:service_id> (POST) - Mark a service request as completed.
- Reject Service Request: /professional/reject_service/<int:service_id> (POST) - Reject a service request.

Customer Endpoints

- Customer Dashboard: /customer-dashboard (GET) - View the dashboard with available services and service requests.
- Customer Search: /customer-dashboard/search (GET) - Search for services, professionals, or service requests.
- Customer Request Service: /customer/request-service (GET, POST) - Request a service from a professional.
- Customer Requested Services: /customer/requested-services (GET) - View all requested services, categorized by status.
- Submit Rating for Service: /customer/service_requests (GET) - Show service requests that can be rated.
- Submit Rating: /customer/submit_rating (POST) - Submit a rating for a completed service.
- Get Professionals by Category: /get_professionals/<category> (GET) - Get a list of professionals based on service category.
- Get Services by Category: /get_services/<category> (GET) - Get a list of services based on category.

Logout

- Logout: /logout (GET) - Log out the user and clear session data.

Presentation Video

- A drive link to the presentation video, which demonstrates the features and functionality of the grocery store application, can be accessed here.
- <https://drive.google.com/file/d/1VmlvNMqMyR-Xeg8-ZYiZeThUhrUlqxZR/view?usp=sharing>