A-Z Household Services Application

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Problem Statement:

It enables customers to be connected to the service professionals, handle all service requests, historical, and live service data with their management through a web application that streamlines services management concerning home services.

Methodology:

<u>Backend Development</u>: The backend was built in Flask, and it has APIs to manage customer and professional data with service requests and also stores reviews.

<u>Frontend Integration</u>: HTML forms are used for registration, service requests, and review submissions whose data are then processed in the backend.

<u>Database Design</u>: Relational tables include entities such as customers, service professionals, services, service history, etc.

Features Overview:

1. <u>User-Friendly Registration</u>

Easiness to customers and the service professionals to register. Professionals upload their resumes and get their skills verified.

2. Diverse Service Offerings:

Customers can choose services from plumbing, electrical repair, cleaning, etc. Predefined packages of transparent pricing help in decision-making.

3. Real-time management:

Booking service for a customer according to his time and place. A professional can keep track of requests, bury things along with the service status update dynamically.

4. Insight on Data:

Rights on the most diverse summary and visual charts for the admins and users. History of service for a customer and performance ratings have been tracked for admins.

5. Very Secure and Scalable Backend:

Backend-powered Flask and SQL Alchemy to ensure data integrity and security. Dynamic uploads of files regarding professional documents in a secured manner.

The Workflow:

1. Customer Workflow:

Customers signup and browse various services to choose the right service package for themselves. They can browse through their service history as well as give feedback or review any of the services used.

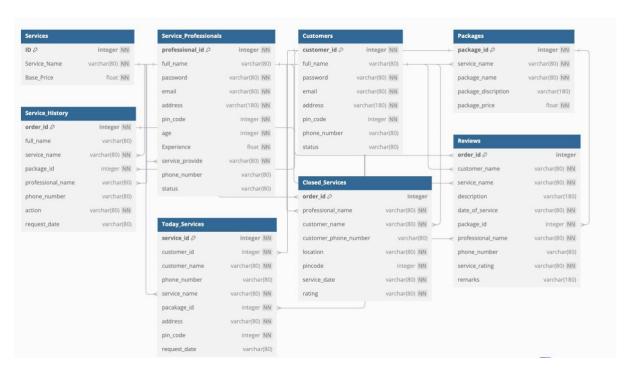
2. Professional Workflow:

Professionals sign up, upload their resumes, and wait for the admin to approve them. Once approved, they will directly be able to take or manage requests for services from the application.

3. Admin Workflow:

The admin keeps watch over the services professionals and customers. However, he can approve or reject the professional application, add or edit service packages, and also render various detailed reports.

Database Design:



Technical Highlights:

- 1. <u>Backend</u>: Flask framework coupled with SQLAlchemy for efficient handling of database operations.
- 2. <u>Database</u>: Above all used as SQLite lightweight storage database with better scaling.
- 3. Frontend: HTML templates powered from Jinja2 for dynamic rendering.
- 4. <u>Visualization:</u> Matplotlib charts, which provide views on services performance and ratings.

Benefits:

For Professionals:

This is a very trustworthy platform for getting very good job opportunities. Quick summary of service history for trust building and credibility.

For Admins:

Overall control of service offerings and professionals. Simple monitoring of the app performance through data visualization.

Conclusion:

This app has changed the way home services are now delivering and managing those services." With its user-friendly design, the new technology provides data-driven insights and a secure infrastructure to connect customers with professionals while ensuring that trust and transparency are maintained. Thank you for your time, I am glad to take your questions and hear your feedback."

Video URL:

https://youtu.be/vZa2vyAPqTE