Household Services Application

A Report for Modern Application Development-II Project

Submitted by

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Project Details

The Household Services Application is a platform that helps customers to connect with service professionals for various services. Customers can create service requests for various services as and when needed and the professionals can accept and proceed further or reject them. Admin manages the overall platform and ensured that only appropriate users can use the platform. Admin can create or make changes to the services. It also ensures that professionals are daily reminded about their pending requests and provides customers the detailed monthly reports of the service requests made so far. The customer can provide reviews to the professional once satisfied after the requests are completed. This creates an efficient, organized system for household services that one can use and request for some services as and when needed.

My Approach to the Project

Having Completed Modern Application Development-I Theory and Project courses, I was familiar with the database management and the process of setting up the backend framework. I learnt about Role Based Access Control (RBAC), user authentication and password hashing for security. I learnt VueJS, an extremely robust framework for frontend design and used CSS and Bootstrap with it for implementing the aesthetic design of webpages. I selected a background image and designed a common login page for admin and users (customer and professionals) and a common register page for the users. I implemented the corresponding dashboards with suitable buttons in navbar for navigating the pages and other functions. Additionally, I learnt about Caching using Redis to improve performance and learnt to implement backend jobs which trigger periodically after certain time interval and which

are user triggered asynchronous using Redis and Celery. Finally using my previous knowledge, I implemented Charts for admin dashboard statistics and customer monthly reports.

Technologies Used

Backend: Flask

Frontend: VueJS, CSS, Bootstrap

Object-Relational Mapping tool for database interaction: SQLAlchemy

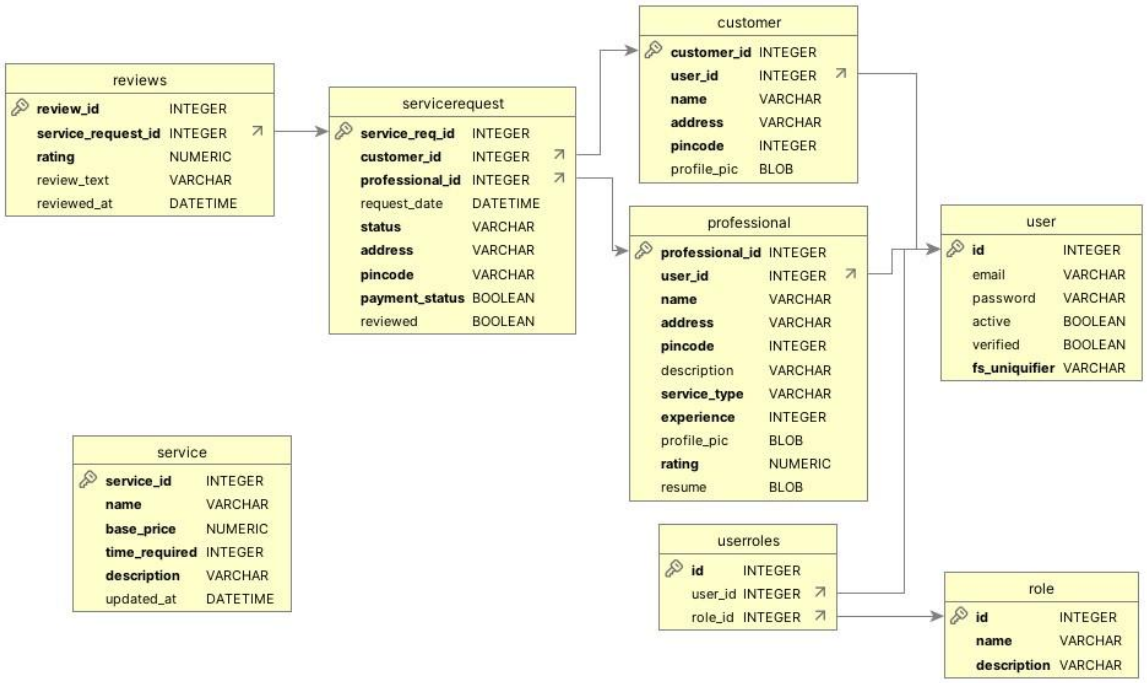
Database Management: SQLite

Statistical Visualization: ChartJS, Matplotlib

Caching: Redis

Backend Jobs: Celery

ER Diagram



Presentation Video

https://drive.google.com/file/d/1yh34nklfnNtpVz8ZZGxRT9RKpEJFwROJ/view?usp=sharing