PROJECT REPORT

HOMIES- A-Z HOUSEHOLD SERVICES

Student details:

Name- Raghvi Gupta

Roll No. -**23f3001927**

Email id- **23f3001927@ds.study.iitm.ac.in**

Course-Modern Application Development 1

Project Details:

Overview of project:

The Household Services Application is a multi-user platform that connects customers with professional service providers, offering a wide range of home services. The app is designed with three distinct user roles: Admin, Customer, and Service Professional, each with tailored functionalities. Customers can search for and book various household services, while service professionals manage and fulfil these requests. The admin role oversees the entire platform, ensuring smooth operations and management. This comprehensive structure ensures efficient service delivery and a seamless user experience for all parties involved.

How I approached the problem statement?

To begin the project, I first revisited the core concepts from the MAD-1 theory and refreshed my knowledge of Flask and Jinja2. I then adopted a step-by-step approach to implement the project, focusing on simplicity, functionality, and scalability. My primary priorities included establishing role-based access control, implementing CRUD functionalities, and creating a structured flow for booking and completing services. The solution is designed to run smoothly on a local machine, with APIs in place to support future integrations. Although the start was challenging, the process ultimately concluded successfully.

Technologies Used

1. Flask: A lightweight web framework for building web applications in Python.

2. Jinja2(via render_template): Template engine for rendering dynamic HTML content.

3. SQLAlchemy: An Object Relational Mapper (ORM) for interacting with databases in Python.

4. Flask-SQLAlchemy: An extension that integrates SQLAlchemy with Flask for easier database management.

5. DateTime: A module to work with dates and times in Python.

6. SQLite: Database management system for storing application data.

7. HTML/CSS/JavaScript: Frontend technologies for user interface design and interactivity.

8. ChartJS: User for creating different types of charts on the admin dashboard

9. BootStrap: A CSS framework for building web pages with pre-styled components.

API ENDPOINTS AND CLASS DIAGRAM