Project Report: Household Services Platform

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1. Introduction

The report presents the development of a Household Services Platform aimed at connecting customers with service professionals, such as electricians, plumbers, and cleaners. This report details the project objectives, approach, frameworks used, database design, and API resource endpoints, if any.

2. Project Details

Project Title

Household Services Platform

Objective

To design a web-based application where users can register as either customers or service professionals. Customers can book services, while professionals manage their service requests. An admin controls the system by adding services, approving professionals, and generating reports.

Problem Statement

The platform should provide a seamless interface for customers to browse and book services, enable service professionals to accept/reject requests, and allow the admin to manage and view statistics.

Approach

A modular approach was taken to separate functionality for customers, professionals, and admins. Jinja2 templates were used for dynamic interface, and Flask handled the backend.

3. Frameworks and Libraries Used

Backend: Flask

Frontend: HTML, CSS, Bootstrap, Jinja2

Database: SQLite

Charts: Chart.js

Other Libraries: Flask-SQLAlchemy

4. ER Diagram

The ER diagram includes tables for Login, Services, Professional, and Service Request

5. API Resource Endpoints

/ - Endpoint for home page.

/admin_login – POST endpoint for logging in as admin.

/login - POST endpoint for user login.

/admin_dashboard – Endpoint for admin dashboard after login.

/add_new_services – POST endpoint to add new service in admin dashboard.

/admin_search – GET endpoint for searching services in admin dashboard.

/professional_register – POST endpoint to register as professional.

/professional_dashboard – Endpoint for professional dashboard.

/customer_dashboard – Endpoint for customer dashboard.

/submit_remark – POST endpoint to submit customer remarks through customer dashboard.

/logout – Endpoint for logging out from current session.

/delete_service/<int:service_id> - POST endpoint to delete a service through admin dashboard.

6. Conclusion

The project successfully implements a Household Services Platform, with a clear structure and separation of responsibilities between customers, professionals, and the admin. As a project it has very limited CRUD operations. The project is heavily emphasised towards front-end designing to make the application user-friendly and appealing. The platform uses Flask for backend, Jinja2 for dynamic

HTML generation, and Chart.js for analytics. It can be expanded with features like payment integration, real-time notifications, and advanced reporting and more.

Video Link of project demonstration:

https://drive.google.com/file/d/1kQLGfFAYW3CCqp3N8f7_cadUIy6_oLbF/view?usp=sharing