

Project Report - Household Services Application

Introduction:

Hello, my name is Pawan Solanki and currently at diploma level. This project report describes the development and functionalities of a Household Services Application, which connects customers needing services (e.g., plumbing, AC repair) with professionals offering these services. The platform comprises three main roles: Admin, Service Professional, and Customer—each with designated permissions and tasks to ensure an efficient service workflow.

1. Objective

The app aims to simplify household service management, offering a secure, user-friendly interface for customers to find verified professionals, manage service requests, and provide feedback. Admins maintain quality control, approving professionals and overseeing platform operations.

2. Frameworks Used

The application uses:

- Flask for server logic,
- Jinja2 templates with Bootstrap for responsive UI,
- SQLite as the lightweight, compatible database.

All functionality has been thoroughly tested in a local development environment.

3. User Roles & Permissions

- Admin: Manages user and service data, approves professionals, and enforces platform rules.
- Service Professional: Registers, manages profiles, accepts/rejects service requests, and completes service transactions.
- Customer: Registers to request services, search by service or location, and leave feedback.

4. Database Schema

- Admin Model: Manages superuser accounts with fields like id, email, and password.
- User Model: Stores customer information and status.
- Professional Model: Holds professional profile data, service expertise, and average ratings.
- Service Model: Defines service categories with descriptions and base prices.
- Request Model: Tracks each service request's status, customer remarks, and ratings.

5. Core Functionalities

- Authentication and Authorization: Enforced with Flask-Login, offering role-based access and session management for Admin, Service Professional, and Customer roles.
- Admin Dashboard: Allows the Admin to manage services, approve professionals, and review user activities.
- Service Management: Admin can add, edit, or delete service categories with essential details like price and description.
- Service Request Management: Customers submit requests; professionals can accept, reject, or close them after completion.
- Search Feature: Customers search by service name or location; Admins search professionals by status.

6. Application Workflow

1. Login & Role Redirection: Users log in and are redirected to dashboards based on their role.
2. Service Request: Customers select services, make requests, and post feedback after completion.
3. Feedback Loop: Professionals receive feedback to improve visibility.

7. Conclusion

This Household Services Application fulfills its goal of connecting customers with trusted service providers, with future improvements like more robust authentication and payment integration planned for enhanced user experience.

8. Video Link :- [Click here for Demonstration Video](#)

9. ER Diagram:

