Project Report: Household Service App

Student Details

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Project Overview

Problem Statement

Develop a comprehensive Household Service App that connects customers with professional service providers across various household services, with three distinct user roles: Admin, Customer, and Professional.

Project Approach

My project development approach was methodical and involved several key steps:

1. **Research and Inspiration**
   a. Conducted extensive research on existing web applications providing similar services
   b. Studied their implementation strategies, user interfaces, and core functionalities
   c. Analyzed user experience and interaction flows in comparable platforms
2. **Learning and Skill Development**
   a. Started from scratch with no prior coding experience
   b. Utilized online resources like Google, YouTube tutorials, and coding platforms
   c. Learned programming concepts, web development frameworks, and best practices
   d. Followed beginner-friendly learning paths and tutorials
3. **Technical Implementation**
   a. Chose Flask as the primary web framework
   b. Implemented a role-based access control system
   c. Developed separate blueprints for admin, customer, and professional functionalities
   d. Created comprehensive routes and views for each user type

Frameworks and Libraries Used

- **Backend**: Flask

- **Database**: SQLAlchemy (Flask-SQLAlchemy)
- **Authentication**: Flask-Login
- **File Handling**: Werkzeug
- **Frontend**: HTML, CSS, Bootstrap (implied from code structure)

Project Features

User Roles and Capabilities

1. **Admin**
   a. Manage professionals (approve/reject)
   b. Block/unblock users
   c. Add, edit, and delete services
   d. View and manage users and service requests
2. **Customer**
   a. Browse available services
   b. Book services from professionals
   c. Manage service requests
   d. Review and rate services
   e. Edit and delete pending requests
3. **Professional**
   a. Set up professional profile
   b. Manage service requests
   c. Accept, reject, and complete service requests
   d. View and manage reviews

Project Video Presentation

https://drive.google.com/file/d/1JPWvRw9bpu8isAGoXTAf8uYTefsSKJ4v/view?usp=sharing

Database Design

Entity-Relationship (ER) Diagram

Service Platform ERD