Project Report (MAD – I)

Student Details

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Project Details

Project Title: Household Services Application

Question Statement: The objective of this project is to develop a multi-user household services application using Flask, Jinja2 and SQLite. The application serves as a comprehensive platform for home servicing, facilitating interactions between admins, service professionals, and customers.

Approach

The development process followed these key steps:

1. **Defining User Roles:**
    - **Admin:** Has root access, manages users and services. ○ **Service Professional:** Provides services, can accept/reject requests.
    - **Customer:** Books services, can post reviews.
2. **Designing the Database:**
    - Developed an Entity-Relationship (ER) diagram to map out the relationships between different entities such as users, services, and service requests.
    - Database has total 6 tables with well defined attributes to match the functionality of the application.
3. **Implementing the Core Functionalities:**
    - **User Authentication:** Developed separate register forms for each user type (Professionals and customers), login is common for all 3 based on priority.
    - **Admin Dashboard:** Created interfaces for the admin to manage users and services.
    - **Service Management:** Enabled creation, updating, and deletion of services by the admin.

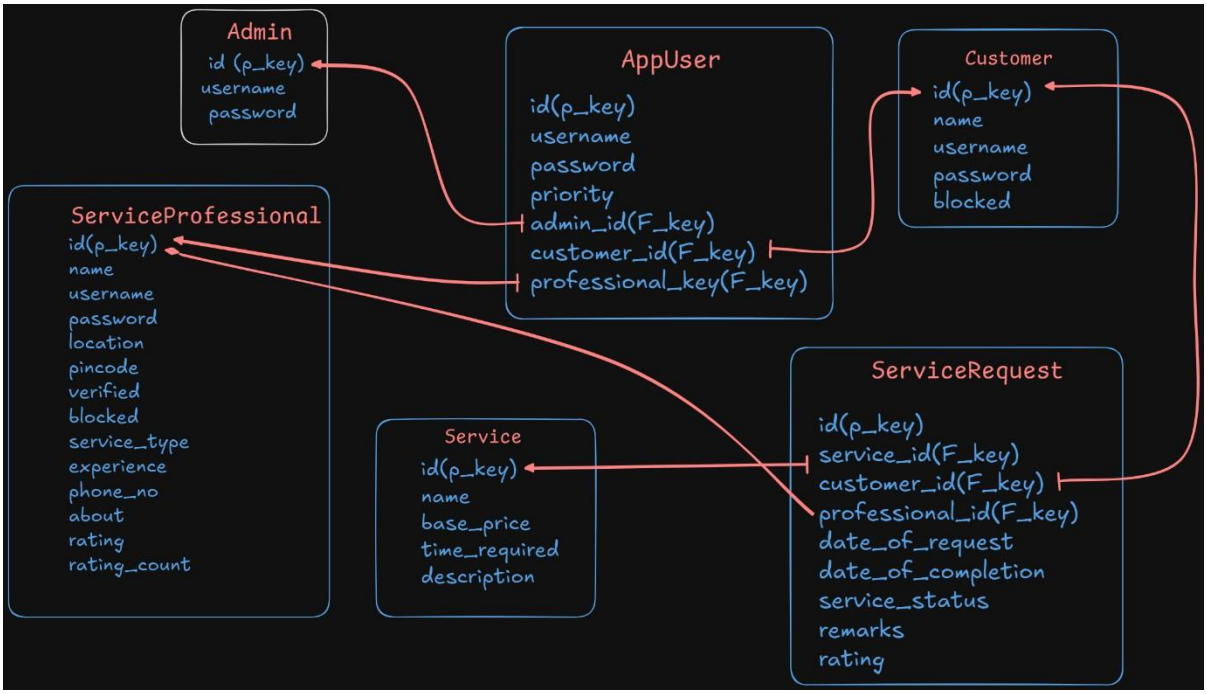
- **Service Requests:** Allowed customers to create, edit, and close service requests.
- **Service Search:** Implemented search functionality for customers to find services by location, name, or pin code.

4. **Validations:**
   - Implemented frontend validations using HTML5.
   - Included backend validations within Flask controllers.
5. **Styling and User Interface:**
   - Enhanced user experience with aesthetically pleasing CSS .

Frameworks and Libraries Used

- **Backend:** Flask
- **Frontend:** Jinja2
- **Database:** SQLite

ER Diagram



Presentation Video

https://drive.google.com/file/d/1xcBDOrfo_iMF5A7unafPTKDvJsunp9n_/view?usp=drive_link