Project Report - Modern Application Development 1

Details of the Student:
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Video link : Demo Video Link

Project Details:

Problem Statement:
The task was to develop a **Household Cleaning Services** application for a company, supporting three types of users: **Admin**, **Customer**, and **Service Professional**, each with unique roles and dashboards.

Technologies Used:

- **Backend**: Python
- **Frontend**: HTML, CSS, Bootstrap
- **Database**: SQLite
- **Templating Engine**: Jinja2

Core Functionalities:

Admin:

1. Manage all users (block/unblock customers and professionals).
2. Create, edit, and delete services.
3. Approve professionals' profiles to enable request handling.

Professional:

1. Create a profile with necessary documents for verification.
2. Accept or reject service requests after approval.
3. Close requests upon completion.

Customer:

1. Create a profile via signup.
2. Browse services and confirm requests.
3. Edit/delete unconfirmed requests and provide feedback after completion.

Database Schema

Tables:

1. **User Table**: Stores common user information, differentiating roles (admin, customer, or professional).
2. **Customer Table**: Contains customer-specific data like `email`, `address`, `pincode`, and `profile_status`. Linked to service requests.
3. **ServiceProfessional Table**: Includes professional-specific data like `experience`, `price`, and `verification` status. Connected to service requests.
4. **Service Table**: Holds service details (`name`, `price`, `description`) and links to professionals offering each service.
5. **ServiceRequest Table**: Tracks requests with fields like `status`, `remarks`, and `reviews` (with a constraint of 0–5)

Relationships:

- **User ↔ Customer/Professional**: One-to-one relationship to separate roles.
- **Service ↔ ServiceProfessional**: One-to-many relationship for services and providers.
- **ServiceRequest ↔ Customer/Professional/Service**: Many-to-one relationships to track requests and their associations.

ER Diagram: