MAD-1 Project Report

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- **Project Question:** *Household Services Application*

It is a multi-user app (requires one admin and other service professionals/ customers) which acts as platform for providing comprehensive home servicing and solutions.

My Approach: I used the **Flask** web framework to build the application, and used **Jinja2** for dynamic HTML rendering, **Bootstrap** for responsive design, and **SQLite** as the database to store user and service data. The application has the following core functionalities:

- **Customer functionalities**: Searching for services, making requests, viewing requests, and leaving reviews.
- **Professional functionalities**: Accepting or rejecting service requests and viewing their performance metrics.
- **Admin functionalities**: Managing users, services, and monitoring activity.

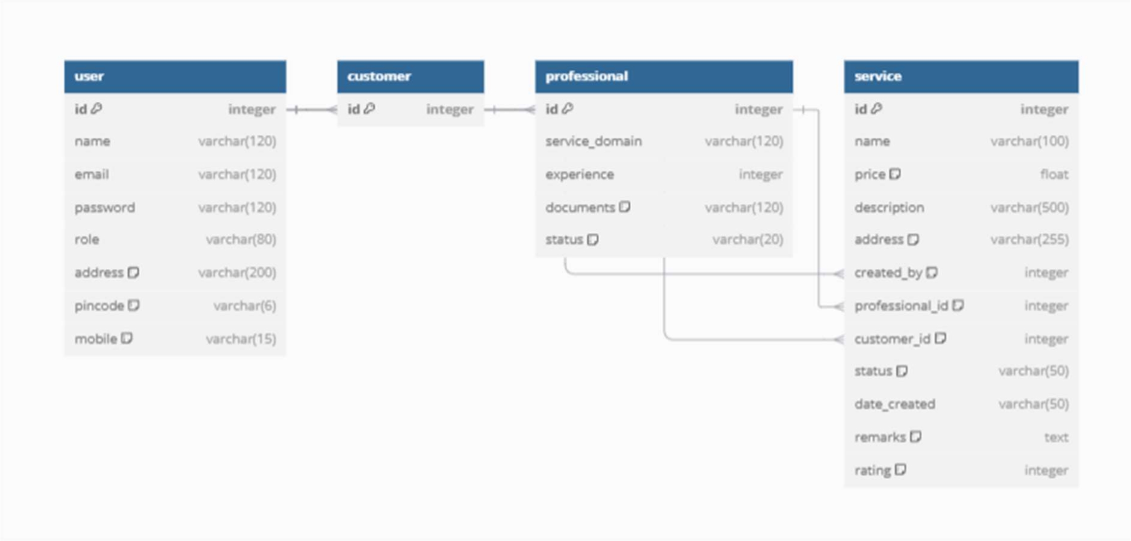
I structured the database with separate tables for **users** (customer and professional roles), **services**, and relationships between users and services. I implemented role-based access control using Flask sessions and redirections based on user roles.

- **Frameworks and Libraries Used:**

- **Flask**: For building the web application and handling HTTP requests.
- **Jinja2**: Template engine used for rendering HTML pages.
- **SQLite**: A lightweight database for storing user and service information.
- **Bootstrap**: For responsive UI design.
- **SQLAlchemy**: ORM for database interactions.

- **Werkzeug:** Provides utility functions for file handling (e.g., secure_filename) and password hashing
- **Flask-WTF**: For form handling (if forms are used beyond just search).
- **OS, Seaborn Matplotlib and Datetime**

- **Database Schema:**



user	
id	integer
name	varchar(120)
email	varchar(120)
password	varchar(120)
role	varchar(80)
address	varchar(200)
pincode	varchar(6)
mobile	varchar(15)

customer	
id	integer

professional	
id	integer
service_domain	varchar(120)
experience	integer
documents	varchar(120)
status	varchar(20)

service	
id	integer
name	varchar(100)
price	float
description	varchar(500)
address	varchar(255)
created_by	integer
professional_id	integer
customer_id	integer
status	varchar(50)
date_created	varchar(50)
remarks	text
rating	integer

- **Drive Link for the project video:**

https://drive.google.com/file/d/1CnPlO66gn2OFmpCnSk7JRKlV2EgukuGo/view?usp=drive_link