Project Report
Modern Application Development -1
Household Services Application

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About Me:

My name is Taniya Chouhan currently pursuing IIT Madras BS degree in Data Science , Currently in Diploma Level. Really love to study with IITM professors. Took MAD-1 project this term which problem statement is Household Services Application.To make this project use frameworks , python libraries, database,html,css etc.At starting it feels difficult to do this project but as start this project and understand things it becomes more fun to do.

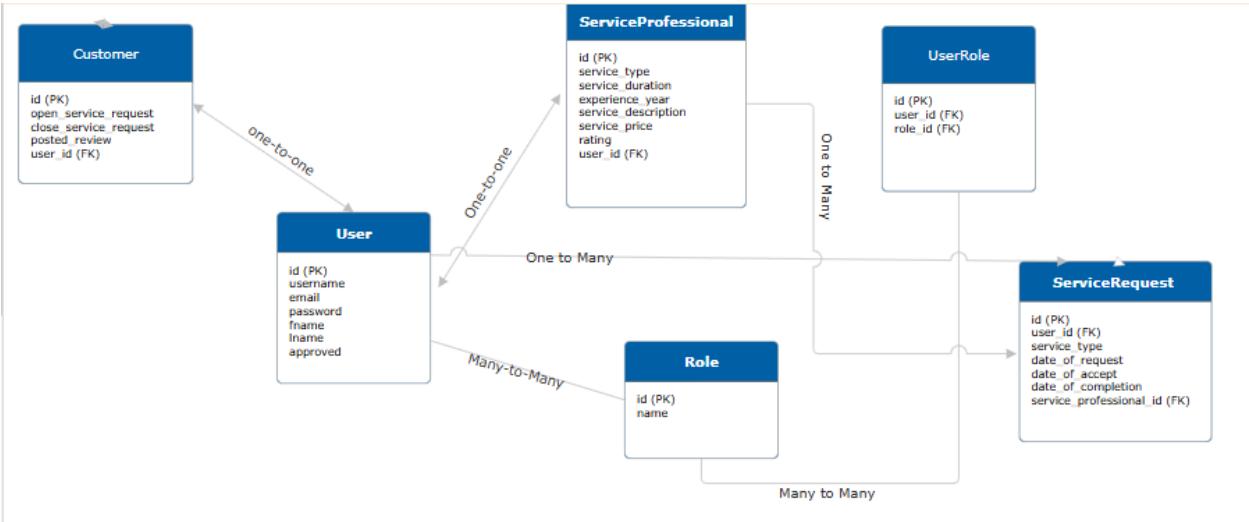
Description:

It is a multi-user app (requires one admin and other service professionals/ customers) which acts as a platform for providing comprehensive home servicing and solutions.
First of all, create a database in which the model is based.
I create two Register page one for Customer and one for Service Professional after Register Customer can login through login page but Service professional need to want that admin approve their profile after approval of profile service professional can also login thorough login page. There is also one login page for admin.
When Admin Login from admin login it redirects it to admin dashboard (admin profile is already saved) no other have access to login in admin. Admin can manage all the users (customers/service professionals),Admin can approve service professionals after their registration and also can block customer and service professionals. Admin can add new services and edit or delete available services.
When Customer login it redirects to the customer dashboard where customer can see its profile and can send service requests for available service profile and can edit or close service requests.
When Service professional login it redirects to service professional dashboard where service professional can see its profile and can accept or decline and complete service requests.Can see all service requests but authorized to accept only the request for their services.There are more features like logout , search etc.

Technologies used:

Flask , Jinja2 , SQLAlchemy
Flask SQLAlchemy
Werkzeug , SqLite

DS Schema Design:



Relationships
roles=db.relationship('Role',secondary='user_role',backref=db.backref('users',lazy=True))
customer_dets = db.relationship('Customer', backref='user', lazy=True, uselist=False)
service_requests = db.relationship('ServiceRequest', backref='user', lazy=True)
service_professional = db.relationship('ServiceProfessional',backref='service_requests')

API Design:
ServiceRequestAPI:
1.Fetching Data:The get method queries all entries from the ServiceRequest table using ServiceRequest.query.all().
2.Formatting Response:Each service request is converted into a dictionary to make it JSON-compatible.
Dates are formatted to YYYY-MM-DD.
3.Returning Data:The response is sent back as a JSON object using jsonify.

Architecture and Features:
The project code is organized based on its utility in different files. I named my project MAD-1 PROJECT.
Inside the project there is a folder name project in which all routes,database,model store.There is also a SQLite page.
Another folder called templates in which all html files are stored like login.html , register.html,base.html,nav.html etc.
There is a main.py folder outside all folders which runs all codes.
Wireframe - @app.route('/login',methods=['GET','POST'])
@app.route('/register',methods=['GET','POST'])
@app.route('/search_services',methods=['POST'])

Video:https://1drv.ms/v/c/4326f4dd95f93cf5/EWoEMldQ9zlKhk3N3a0JHQ4BOrOGht-ej_cf1hLOw3LkOQ?e=1zmRKw