Project Report:

Author: Name: Brahmareddy Ambavarapu Roll no: 23f2003541, Email:

23f2003541@ds.study.iitm.ac.in, I am currently a student at the diploma in programming level.

Project Details:

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

Technologies used

- 1. Flask: for request handling, rendering templates, defining views/routes to the application
- 2. Flask Sqlalchemy: defining models, doing query operations on the database, committing changes to the database.
- 3. Jinja: for templating, provides more flexibility to the html document.
- 4. Sqlite: for database tables
- 5.javascript:for graphs.

DB Schema Design

All the classes have an id field as the primary key.

1. User class

- a. u id: user id, integer, primary key
- b. username: string, unique, cannot have null value
- c. password: string, cannot have null value
- d. isadmin:boolean, cannot have null value
- e. isprofressional:boolean, cannot have null value
- f. iscoustomerctive:boolean, cannot have null value
- g. isblocklisted:Boolean,cannot have null value

2. Service class

- a. sid: integer, primary key
- b. name: string, unique, cannot have null value
- c. price: integer, cannot have null value
- d. timerequired: integer ,cannot have null value
- e. description: string, cannot have null value.

3. Customer class

- a. cid: integer, primary key
- b. username: string, unique, cannot have null value
- c. password: string, cannot have null value
- d. fullname: string, cannot have null value
- e. phone: integer, cannot have null value
- f. address: string, cannot have null value
- g. pincode: integer, cannot have null value

4. Proffesional class

- a. pid: integer, primary key
- b. username: string, unique, cannot have null value

c. password: string, cannot have null value d. fullname: string, cannot have null value e. sev_name: string, cannot have null value f. specality: string, cannot have null value g. Experience: integer, cannot have null value h. phone: integer, cannot have null value i. address: string, cannot have null value j. pincode: integer, cannot have null value k. rating: integer, cannot have null value

5. Service Request class

- a. srid: integer, primary key
- b. service id: foreign key is sid (Service id in the Service table)
- c. customer_id: foreign key is cid (Customer id in the Customer table)
- d. Profressional id:foreign key is pid(Professional id in Professional table
- e. dateofrequest: date, cannot have null values
- f. dateofcomplete: date, can have null values
- g. rating: integer, cannot have null values
- h. remarks: string, can have null values

Architecture and Features

Architecture

Following the recommended flask app structure.

- 1. The "backend.py" containing the database schema related definitions is divided into a separate module from the "app1.py" which contains all the views.
- 2. Templates folder is used to serve the html files.
- 3. The "Instance" folder has the database defined.
- 5. myenv contains the required python libraries used to build the application.

Features:

Admin:

- Admin can login
- Can approve professional
- Add/Edit services
- Block/unblock customer/professional

Customer:

- Register and Login
- Can book service
- Give rating and remarks to that Professional

Professional:

- Register and Login
- Can accept/reject the service
- He/she can accept multiple services

Project

video: https://drive.google.com/file/d/154zZexT12Vs4bvWNoQqfGwwqK_PjO8rE/view?usp=drive_limk