Author

Akshat Aggarwal 21f2000341 21f2000341@student.onlinedegree.iitm.ac.in Hello, I am Akshat Aggarwal. I am an aspiring Data Scientist.

Description

Quantified Self is a web application which tracks a user's lifestyle. It keeps a track of a user's Temperature, SpO2, Calories, Moods and Run. It can add data to the trackers, update and delete the data. It also shows a graphical presentation of the user's records.

Technologies used

Technologies used include:

Flask: Quantified Self is a flask application.

SQLite: To store the database

Flask-sqlalchemy: To access the database models.

Bootstrap: For aesthetics

Chart.js: For real-time graphs of the records

DB Schema Design

There are 6 DB models. Out of which one is the "User" table and the remaining 5 are the trackers namely: "Temperature", "SpO2", "Calorie", "Mood" and "Run"

The "User" Table:

The User table contains 3 fields:

user_id: integer, primary key, unique, autoincrement

username: varchar, unique

password: varchar

Trackers: "Temperature", "SpO2", "Calories", "Mood", "Run"

Every has the following fields:

tracker_id: integer, primary key, autoincrement

tracker_time: timestamp, not null tracker_value: integer, not null

tracker_note: varchar

Architecture and Features

The QuantifiedSelf Folder contains the following:

- 1. requirements.txt
- 2. Main.py
- 3. Templates folder
- 4. Application folder
- 5. Db_directory folder
- 6. Static folder
- 7. Local_run.sh
- 8. Local_setup.sh
- 9. Virtual Environment folder named .QuantifiedSelf-env

The "templates" folder contains all the required html files like user_login.html, register.html, dashboard.html etc.

The "application" folder contains:

- 1. __init__.py
- 2. _pycache_ folder
- 3. Config.py
- 4. Controllers.py
- 5. Database.py
- 6. models.py

The "db_directory" folder contains the database file named trackers.sqlite3 The "static" folder contains the required css and javascript files.

Link to the repl:

https://quantifiedself.akshataggarwal9.repl.co/

Video

https://drive.google.com/file/d/1Wg6GdkGWlquIo8jLArM42qc6oTl3ei1S/view?usp=sharing