**Project Documentation**

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I am a student and a tech enthusiast. I am in my 2nd year in Bsc Economics.

Description

We needed to make a quantified self app which is a web application where user can create their own trackers to track their daily activities like time spent in playing sports, sleep,their mood ,etc.the tracker will show user graphs which will help the user analyze their daily activities

Technologies used and its Purpose

* Python
* Flask
* Html
* Flask Sql-Alchemy
* Sqlite
* Jinja
* Bootstrap
* Flask login
* Werkzeug security -
* Matplotlib

Flask was used to develop web applications using python. Jinja is the templating language used for features like for loop,conditional statements in html file. Flask sqlalchemy is a package of python which has features which helps to work with our sqlite database.Flask Login and werkzeug security for login and sign up. Bootstrap for styling. Matplotlib for generating graphs.

DB Schema Design

User Table

* Id (primary key)
* Username (unique)
* Password (in sha 256 format)
* First\_name

Trackers Table

* Id (primary key)
* Tracker\_name (not null)
* Tracker\_type
* Descriptions
* Settings
* Time\_stamp (date-time format)
* Value
* Note
* User\_id (foreign key)

The user table will have all the users who sign up and help in login. The trackers table has all the new trackers the user made with all the entries of the tracker.we use conditionals and for loop to get the the logs of each tracker.

API-not used

Architecture and Features

* main .py is the main file of python which generates the website using server
* Init.py has a function of creating app and creating the database.(in website folder)
* Auth.py is a routing file which has routes of login and sign up page.(in website folder)
* views .py is the routing file which has routes of all other pages.(in website folder)
* Models.py has the sql model classes.(in website folder)
* Inside the template folder are all the html pages
* Inside the static folder is the graph image

Features

* New user login and sign up with password security
* Dashboard has the list of all trackers the user made with the ability to delete the tracker or edit its name and description. The user also has ability to enter a new entry for each tracker
* When the user clicks on the tracker, it gets redirected to a page for that tracker where all the entries and graph shown. Users can edit or delete each entry and the graph will generate with new set of values.

Video