QuantifiedSelf AppProject Report

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Technologies used

Flask: Application code
Flask-Sqlalchemy: Flask extension for Sqlalchemy to create database models
Flask-login: Flask package to add sign-up and login feature to the application
Matplotlib: Python library to add graphs in the application
Flask WTF: Wtforms form handling library

Models

The database contains two tables User and all
User Table – Contains information about the user which will be used during the sign-up and log-in into the app. The password is stored in hashed format.
all Table – Contains all the tracker information and has a foreign key user_id which keeps track of which user entered a particular tracker.
The table keeps information about trackers such as Last-Tracked, Tracker_type, Value, description etc.

```
class User(db.Model, UserMixin):
    id = db.Column(db.Integer, primary_key = True)
    username = db.Column(db.String(20), nullable = False, unique = True)
    password = db.Column(db.String(80), nullable = False)
    all = db.relationship('All')

class All(db.Model):
    __tablename__ = 'all'
    Tracker_id = db.Column(db.String)
    Tracker = db.Column(db.String)
    Last_Tracked = db.Column(db.String, primary_key = True)
    New_Event = db.Column(db.String)
    Action = db.Column(db.String)
    tracker_type = db.Column(db.String(150))
    On = db.Column(db.String)
    Value = db.Column(db.String)
    Description = db.Column(db.String)
    Setting = db.Column(db.String)
    user_id = db.Column(db.Integer, db.ForeignKey('user.id'))
```

Overall System Design

- All the HTML files are present in the templates folder
- All the CSS files are present in static/styles folder
- On opening the apllication Home Page is shown where the user is provided with an option to sign-up or sign-in
- After creating an account or logging in the user is taken to the dashboard where different types of trackers are shown
- The user is also provided with an option to create a new tracker and also delete the exisiting ones
- Upon clicking on a tracker the user is shown different logs of the tracker along with the timpestamp of the tracker log
- A trendline graph of the different values entered by the user for the tracker is also shown
- main.py has the main files

Project replit link

- https://finalproject.jithinpod.repl.co/

Video(Login using IITM Email)

- https://drive.google.com/file/d/1qkXXnsocALw3BSuTNVjUGliidtUJBr7E/view?usp=sharing