Author

Name : Ashrey
Roll number : 21F2000448
Email id : 21f2000448@student.onlinedegree.iitm.ac.in
I love to do maths as well as programming, which data science provides me in the perfect proportion. I'm currently pursuing B.Sc. Mathematics (Hons).

Description

The main aim of this project is to create a blog application using Flask, HTML, SQLite, etc. CRUD on blogs and user profiles along with alert messages and the ability to follow/unfollow other users, proper login system for improved security has been implemented in the project.

Technologies Used

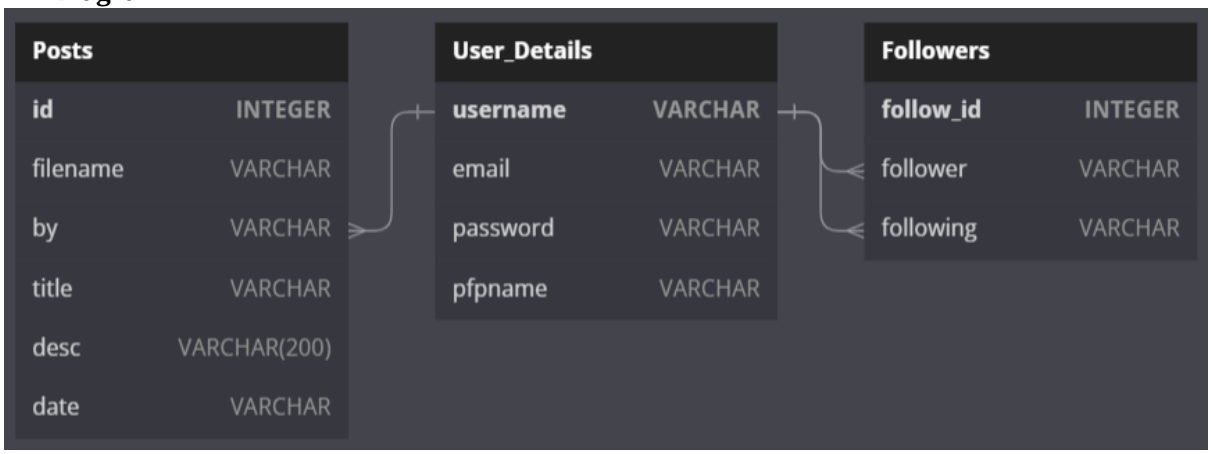
Here's are the technologies I used in this project. Python, HTML/CSS/JS, Jinja, Bootstrap, Flask, Flask-Login, SQLite, Flask-SQLAlchemy, Extensions (like: request, os), Werkzeug(security & utils).

- Python is the core programming language used.
- Flask is the main framework used for the Web-app.
- Flask-Login is used for managing multiple user login and keeping a session alive.
- Flask-SQLAlchemy is the SQL toolkit used to connect with the database file.

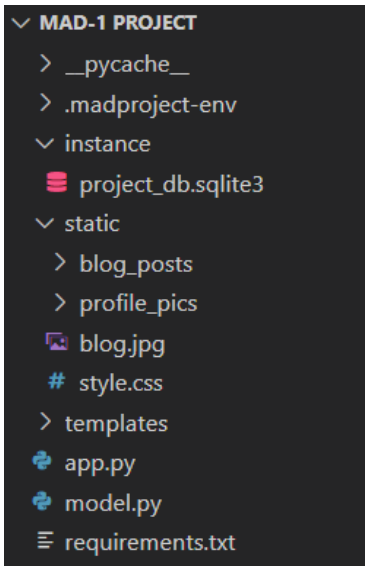
DB Design Schema

Table Name	Columns	Description	Constraints
User_Details	username	Username of the user	String, Unique, Primary_key
	email	Email ID of the user	String, Unique
	password	Password of the user	String, Unique
	pfpname	Name by which the user's profile pic will be stored	String, Unique
Posts	id	Unique id for each blog	Integer, Primary_key, Autocrement
	filename	Name by which each blog image will be stored	String, Unique
	by	Username of the user who created the post	String, Foreign_key
	title	Title of the post	String
	desc	Description of the post	String
	date	Date & time when the post was created	String
Followers	follow_id	Unique id for each follow/following	Integer, Primary_key, Autocrement
	follower	Current user who is following other users	String, Foreign_key
	following	User who is being followed by current user	String, Foreign_key

ER Diagram



Architecture



- Here, I have 2 folders:
  - static - which holds the image files
  - templates - which holds all the HTML files.
- Then, I have made 2 python files:
  - app.py file has the code for the main code to start the Web App
  - models.py file has the all the code related to the different models.
- Project_db.sqlite3 is the database file.
- README.md has the instructions on how to start the Flask Web App.
- Requirement.txt has the required packages name

Features

Here's a list of features:

- Multiple users can use the Web App at the same time.
- Users can access the Web App even after closing and re-opening the browser and it wouldn't take the user to the login page unless the user have logged out or have accessed the login page explicitly.
- Interactive page which shows an alert when we delete a blog or user or if the password given does not match the re-typed password during new registration.
- CRUD operations on tracker - Create, Read, Update, Delete.
- CRUD operations on log - Create, Read, Update, Delete.

Video

Link to my Video: https://drive.google.com/file/d/11fQ0YEL-QMh7ibdX3boNNA-LnZ76mHWL/view?usp=share_link