

MAD-1 PROJECT REPORT

Author

Name : Ram Deepak P

Roll Number : 21f2001114

Email ID : 21f2001114@student.onlinedegree.iitm.ac.in

Description

Blog Lite, a social media web application where users can create and post blogs, follow or unfollow other bloggers and see the posts of other bloggers. Users will have a unique username. Users can edit and delete their posts.

Technologies used

Used HTML, CSS, Jinja-II for frontend, flask and sqlalchemy for backend and sqlite3 for database. Created HTML templates using Jinja-II and utilized it's template inheritance ability. Used flask-login to manage login. Used flask-forms for login, register, new blog and update blog forms. Used flask_bcrypt to hash the password. Utilized wtform's validators for validating inputs. CRUD operations are implemented with the controllers.

DB Schema Design

User table schema

id	INTEGER	Primary key, auto increment
firstname	TEXT	Not null
lastname	TEXT	Not null
email	TEXT	Not null, unique
username	TEXT	Not null, unique
password	INTEGER	Not null

Profile table schema

id	INTEGER	Primary key, auto increment
user_id	INTEGER	Not Null, unique, ForeignKey(user.id)
posts	INTEGER	Not null
followers	INTEGER	Not null
following	INTEGER	Not null
photo	BLOB	Not null

Posts table schema

id	INTEGER	Primary key, auto increment
user_id	INTEGER	Not null, unique
title	TEXT	Not null
description	TEXT	Not null
created	INTEGER	Not null
image	BLOB	Not null

Followers table schema

f_id	INTEGER	Primary key, auto increment
user_id	INTEGER	Not null, Foreign key(user.id)
follower_id	INTEGER	Not null, Foreign key(user.id)

Following table schema

fl_id	INTEGER	Primary key, auto increment
user_id	INTEGER	Not null, Foreign key(user.id)
following_id	INTEGER	Not null, Foreign key(user.id)

Architecture and Features

PROJECT-FOLDER

- application
 - Python files
- db directory
 - sqlite3 database
- static
 - images
 - image
 - css files
- templates
 - HTML files
- app.py
- default-image.jpg
- readme.md

Blue - folder | Green - file

Basic login and register forms are used. Once the login is validated, the user is directed to his/her/their profile page. The user's profile photo, number of followers, number of following and posts are displayed. The usernames of those who follow and are followed by the user can be viewed by clicking on the followers and following. A separate search page is given where users can search for other bloggers using their first name and last name. Matching results will get displayed. Separate option for creating posts is given. Edit and delete option of a post is given in the post itself.

VIDEO LINK

https://drive.google.com/file/d/17Q_pZ7Tkum0VLYf4hiqnTRhq7huxhBUL/view?usp=share_link