REPORT

Author:

Name: Sahil Rajesh Bhure Roll No: 21f1006487

Mail: 21f1006487@student.onlinedegree.iitm.ac.in

Problem Description:

To create a flask-based blogging web application in which users can make, update, delete blog posts, able to like and comment on the post, follow unfollow each other etc. With this project we will get familiar with flask framework and its extensions, the Jinja2 rendering engine etc.

■ Technologies used:

Flask Framework

HTML - to create frontend structure of web app

CSS – to add styling in our web page

Bootstrap - for creating layouts using responsive CSS

Jinja 2 – to build extensible templates

SQLite3 – for database management

Flask extensions such as: Flask-wtf, flask-SQLAlchemy, flask-bcrypt, flask-login etc.

Database schema design:

Database name - "account"

There are 5 tables in the database –

1) Table 1- User

```
Fields / Columns : ( 'id' (PRIMARY KEY) , 'username' (UNIQUE), 'email' (UNIQUE), 'image_file' , 'password')
```

2) Table 2 -Followers (Relationship association table)

```
Fields / Columns: ('follower_id' (FOREIGN KEY), 'followed_id' (FOREIGN KEY))
```

3) Table 3 -Post

```
Fields/Columns: ('id' (PRIMARY KEY), 'title', 'date_posted', 'image_file', 'content', 'user_id' (FOREIGN KEY))
```

4) Table 4 – Like

```
Fields / Columns : ( 'id' (PRIMARY KEY) , 'date_posted' , 'author' (FOREIGN KEY) , 'post_id' (FOREIGN KEY) )
```

5) Table 5 - Comment

Fields / Columns : ('id' (PRIMARY KEY), 'text', 'date_created', 'author' (FOREIGN KEY'), 'post_id' (FOREIGN KEY))

Architecture and Features :

Architecture:

All the project files are in application folder. The application folder has 2 subfolders viz. static and templates. The static folder contains all the image files, css used in the project etc. and the template folder contains all the html files which includes the jinja templates formatting. The application folder also contains all the python files viz. __init__.py, models.py, forms.py, run.py. All the controllers are present in the routes.py file.

Features:

The web application developed contains all the core requirements mentioned in the problem statement-

- 1. It has a signup and login system for the users.
- 2. Users can post a blog post with caption and image.
- 3. Other Users can like and comment on these posts.
- 4. Users can Follow/Unfollow each other.
- 5. User can update or delete a particular post.
- 6. List of users can be searched using usernames.
- Screencast Demonstration video link:

https://drive.google.com/file/d/1K4alZ2OWaodCCXElEneDT_UR3My3sxgR/view?usp=share_link