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I have completed MCA and have 8 years of experience in Mainframe Technology. Currently I am a housewife.

Description

BlogSpot is a multi-user app used for creating Blogs or posts. Users can post Blogs and follow other users. Users can see the posts/Blogs created by the users whom the follow. Users can like, dislike or comment to a post. Users can export/import his posts. There is a facility to send daily and monthly user activity reports via email.

Technologies used

Flask – for developing application code
SQLAlchemy – for database connectivity
Flask_security – for token based login management
HTML – for designing web pages
Flask-restful – for API development
pandas – for exporting to a .csv file
JSON – for data transfer
VUE JS – front end design
Flash-caching – caching
Flask-CORS – for cross-origin resource sharing
REDIS – for backend jobs
CELERY – for backend jobs
JINJA2 – for formating
Mailhog – for mail testing
Weasyprint – to make PDF from html

DB Schema Design

1. User Table:

Column Name	Data Type	Constraints
ID	Integer	Primary Key
Username	String	Unique (index)
Email	String	Unique
Password	String	
Profile_image	String	
Active	Boolean	
fs_uniquifier	String	Unique
report_format	String	

Created an Index on username column for faster search.

2. Role Table:

Column Name	Data Type	Constraints
ID	Integer	Primary Key
Name	String	Unique
Description	String	

3. Posts Table:

Column Name	Data Type	Constraints
Post_id	Integer	Primary Key
Post_title	String	Unique, Not Null
Description	String	
Image_url	String	
Post_created_ts	DateTime	Not Null
Likes	Integer	
Dislikes	Integer	
User_no	Integer	Foreign Key (User.id)
Post_updated_ts	DateTime	

4. Followers Table:

Column Name	Data Type	Constraints
User_no	Integer	Primary Key, Foreign Key (User.id)
Following_user	Integer	Primary Key, Foreign Key (User.id)

5. Comments Table:

Column Name	Data Type	Constraints
Comment_id	Integer	Primary Key
Comment_text	String	
Post_id	Integer	Foreign Key (Posts.post_id)
Username	String	Foreign Key (User.username)

API Design

APIs for interaction with users and blogs – implemented using flask-restful Resource, API. CRUD on User, CRUD on Posts, APIs for getting the blogs/posts to show in feed, API for adding / deleting comments, API for searching users, for following and unfollowing Users can be performed.

Project Architecture:

The ProjectBlogSpot is the main folder for this project. The API is blog_app_api.py ProjectBlogSpot. HTML files are present in templates folder inside ProjectBlogSpot, Database file blog.db. CSS styles are defined in styles.css inside static folder. All the images are also available in static folder. The javascript code is inside static/jscode. All the components are inside ststic/jscode/components. The ProjectBlog folder also contains the requirement.txt file containing the necessary python packages and a README.txt file explaining how to run the code.

Features:

BlogSpot is a multi-user app used for creating Blogs or posts. Users can post Blogs and follow other users. Home page allow Users to see the posts/Blogs created by the users whom the follow. Users can like, dislike or comment to a post. User can search for other users giving the name and follow them. There is a provision to unfollow also. User can create new post. Users can view, modify or delete the post created by them using Profile page. Profile page also displays number of posts created by the user, number of followers and number of following users. Also from profile page, user will have a facility to modify personal details and delete the user account. Import and Export features also available. Daily and monthly reports will be sent to users using backend scheduled jobs.

Video:

https://drive.google.com/file/d/18Ux82N7-IVG04ZkZsvQxVzoWyUU0N8ZW/view?usp=share_link