Application Design Document

Author

Name: Sandip Biswas Roll Number: -21f1002787

Email: - 21f1002787@ds.study.iitm.ac.in

I am working professional residing in Jamshedpur, Jharkhand. I am passionate about emergent technologies and

acquire those skills

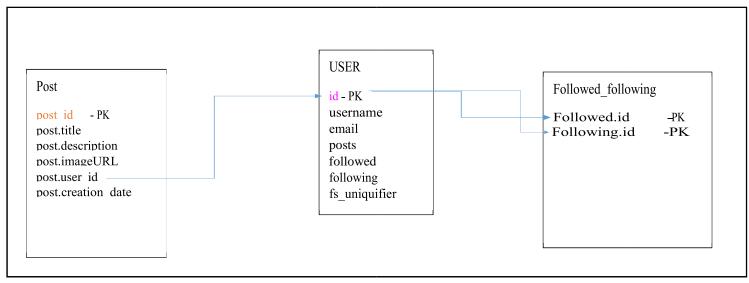
Description

This document will describe the concept, database design and functionality of BlogLite application. This application allow the user to register and login to the application where he/she can share blogs. He can also follow other users and the posts by these users will show up in his feed. This application also allows you to download the posts you have published.

Technology used

Name	Description
Vue 2,vue-router	For web application development i.e. to render html page, Routing
Flask-RESTful	For Rest service API calls, fetch calls
Flask-SQLAlchemy	Used as an ORM to interact with the database
SQLite Database	Database to store user and posts data
Flask-Security	For Token based Login Authentication and user creation
Redis	Cache database, message queue result Backend
Celery	For Job scheduling and processing, user triggered async jobs
flask_caching	For caching API call results
MailHog	To send mail to user with monthly reports and alerts
Weasyprint	To Convert HTML report into PDF
Jinja2	To Report and Email body template design

DB Schema Design



Architecture

This project is mainly separated into 2 folder called API and UX.

API consists of Database, models, Resources, main.py, config.py, some utility endpoints etc.

<u>API</u>---- (Folder)

- 1. models this has .py files for user and post model, it initializes the database
- 2. resources this folder has also the resource class objects for handling API calls
- 3. Utils this folder has some extra end points, caching configurations, initial database creation and user entry
- 4. pdf_reports It has the reports to be sent to user on monthly basis
- 5. .
- 6. celery it configures the celery and has celery initialization functions File:
- 1. Celery_cache.py It is used to schedule job on demand or based on monthly or daily schedule.
- 2. Main.py it is heart of system which is used to link, configuration all the application listed above

UX consists of Vue Components, Router, Vue View.

<u>UX</u> ---- (Folder)

- 1. Components it is vue sfc used to prepare different views
- 2. Router contains all the vue routes and associated views
- 3. View it is comprised of various vue SFCs

File

- 1. app.js initializes the vue instance and attached vue router to it
- 2. Index.html- this is the single page of the single page application

Features

- 1. Login/Signup:- This application allows user to create an account and login to the system. The user is welcomed with the feed page where he will get to see various posts from people he follows in the app. There is this profile page where he can view various stats like number of posts, number of users that he has followed and the number of users that follow him
- 2. User profile: the user can click the name of a user and navigate to his profile page, where he could see similar stats about the profile owner. He could follow or unfollow him by clicking a button
- 3. User can create posts and edit existing posts, a post has a title, description and an image. This post will be visible to people who follow the user.
- 4. User can search for other users through the search page.
- 5. User gets daily reminder in he is inactive on the platform the entire day

6. The app sends monthly engagement report where the user can have a summary of the connections he has made and the posts he has shared.

Video Link:-

https://drive.google.com/file/d/18S4ct7XRTfz7y1ELI41-2E5TISD53lag/view?usp=sharing