Blog-Lite Project Report

Name: Dhruv Chawla

Email: 21f1000258@ds.study.iitm.ac.in

Recording link: https://drive.google.com/file/d/11Xo1609_KuUhENTm4SR39AW2DnIopfdU/view?usp=share_link

I am Dhruv Chawla, currently pursuing a BTech degree at PES University, Bangalore. The following is a report of my Blog-lite applicaiton built for the MAD 2 project.

Description:

I have used VueJS for building the frontend and Flask for the backend. The blog has the following functionality:

- Login/Signup with SHA256 encryption security
- Remember me to stay logged in
- Create/Delete/Edit/Export Post
- Follow/Unfollow Users
- Users profiles with relevant information
- Unique users feed filtered by followed users and sorted by time posted
- Jobs to download CSV and send alterts via Chat

Database Schema:

```sql
CREATE TABLE users (
    id INTEGER NOT NULL,
    email VARCHAR(100),
    name VARCHAR(100),
    password VARCHAR(100),
    followers_count INTEGER,
    following_count INTEGER,
    posts INTEGER,
    PRIMARY KEY (id),
    UNIQUE (email)
)

CREATE TABLE posts (
    id INTEGER NOT NULL,
    title VARCHAR(100) NOT NULL,
    caption VARCHAR(255) NOT NULL,
```

```
    image_url VARCHAR(255) NOT NULL,
    timestamp DATETIME,
    user_id INTEGER NOT NULL,
    PRIMARY KEY (id),
    FOREIGN KEY(user_id) REFERENCES users (id)
)

CREATE TABLE user_follows (
    id INTEGER NOT NULL,
    follower_id INTEGER NOT NULL,
    following_id INTEGER NOT NULL,
    PRIMARY KEY (id),
    FOREIGN KEY(follower_id) REFERENCES users (id),
    FOREIGN KEY(following_id) REFERENCES users (id)
)
```

Frontend:

The front-end built using VueJs composes of many views and components. The components are abstractions of repetitive code. Each view has its own style tag with its CSS. The script tags contain the calls to the Flask API.

API:

The VueJS app uses axios to send get and post requests to the flask API. The flask API then connects to the SQLite database using SQLAlchemy and sends queries to perform database operations.

Additional:

I have created a bash script called `run.sh` to run the app with just one command `source run.sh`. Make sure you are in the directory of the project while executing it.