## Author

Name: J S RANJITH

Roll Number : 21f1002171

• **Email**: <u>21f1002171@student.onlinedegree.iitm.ac.in</u>

• **About me**: I am self motivated and a hardworking person, I will not settle until I achieve my goal.

# Description

- **Blog Lite** is a multiuser application , where each user should be able to create , view , and update their account.
- Each user should be able to create, read, update and delete their blogs.
- Users should also be allowed to follow and unfollow other users within the application.

# Technologies used

flask

Used for developing the application.

flask restful

Used for developing the REST API.

Flask SQLAlchamey

Used for creating database models.

• Sqlite3

Used for storing the data.

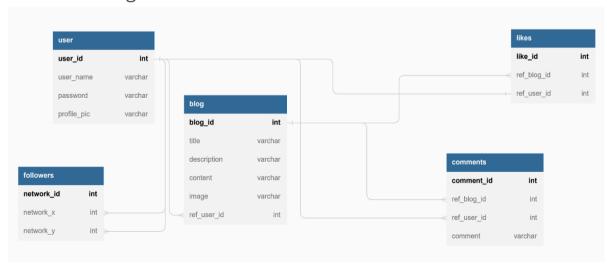
HTML

Used for creating interactive webpages.

CSS (Bootstrap)

Used for styling the webpages.

# DB Schema Design



- In my DB schema user and blog table have a **one-many** relationship because the application allows user to create multiple blogs individually.
- Columns **network\_x** and **network\_y** (**followers** tables) are foreign key constrained to column **user\_id** (**user** table), because the followers table is used for storing the followers and following information of users.
- Columns ref\_blog\_id and ref\_user\_id (likes and comments tables) are foreign key constrained to column blog\_id (blog table) and column user\_id (user table) respectively, because the likes and comments table is used for storing the likes and comments information of users.

## **API** Design

- API was created using **flask\_restful** for performing CRUD operations on blogs.
- GET, PUT and DELETE operations are done on endpoint: /api/blog/<blog\_id>
- **POST** operation is done on endpoint: /api/create\_blog

#### Architecture and Features

- Project folder
  - templates folder (contains html files)
  - > static folder (contains css files)
    - blog\_images folder (stores images of blogs)
    - profile\_pic folder (stores profile pictures of users)
  - > instance folder
    - bloglite.sqlite3 (database of the application)
  - > **app.py file** (controllers and models)
  - > api.py file (api resources)
  - Blog\_API file (yaml file)
  - Project Documentation file (pdf file)
  - > readme.md file (markdown file)
- User can create a account using sign up.
- User is allowed to sign in only if the user has a account, done by checking if the user detail entered for sign in is present in the database or not.
- User can edit his/her profile.
- One can search for other users within the application, done by querying for the usernames which contains the search value.
- Users can follow or unfollow other users.
- Users are allowed to create, edit, read and delete the blogs or posts.
- Users' feeds are updated as they follow other users in the application.
- A blog or post can be liked and commented by the users.
- Each of the above features are implemented as controllers with different endpoints

### Video