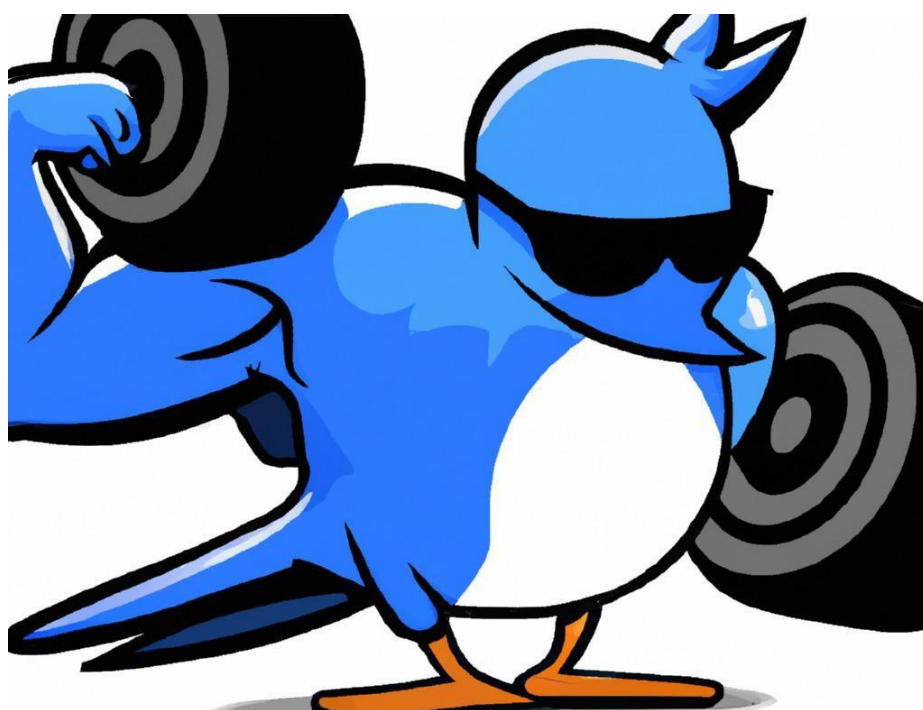


## COMPUTER SCIENCE PROJECT ON

# Twitter But Better

The only social Media app you will ever need



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Reg. No.	
Academic Year	2023-2024

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# INTRODUCTION

This project has been coded using the Python Programming Language and MySQL.

Python is a popular programming language. It was created by Guido van Rossum, and released in 1991. It supports multiple programming paradigm, including structured ,object-oriented and functional programming. Python consistently ranks as one of the most popular programming languages

MySQL is the most popular Open-Source relational SQL database management system. It is fast, reliable, scalable, and easy to use. It was originally developed to handle large databases quickly and has been used in highly demanding production environments for many years.

# THEORY

This project is based on a social media platform that allows users to create an account, post common interests and like or dislike posts.

Twitter But Better offers a unique web scraping setup. In addition, it offers a recommendation engine to allow users to keep close tabs on news headlines and their personal interests.

The main page offers a variety of features, namely likes, dislikes, comments, hashtag-based ordering and the aforementioned web scraping data.

Polished off with an accessible, comprehensible and colourful user interface, it is a sure-fire way to engage the visual appeal of users.

# SYSTEM REQUIREMENTS

Operating System	Windows version after 7
System type	x64-based PC
Processor type (Minimum):	3.60 GHz, 2 Cores, 4 logical processors
Processor type (Recommended)	4.2 GHz, 4 Cores, 6 logical processors
RAM (Minimum)	4GB
RAM (Recommended)	8GB

# SYSTEM DESIGN

## **Modules:**

1. Flask----->Web server
2. mysql-connector-python----->database python interface
3. requests----->web scraping
4. beautifulsoup4----->web scraping
5. cryptography----->to encrypt data and store in database
6. socket----->to establish client - server connection
7. time----->for server logs and to make sure stable uptime in server system
8. OS----->to autonomously run certain executable lines and for package installation

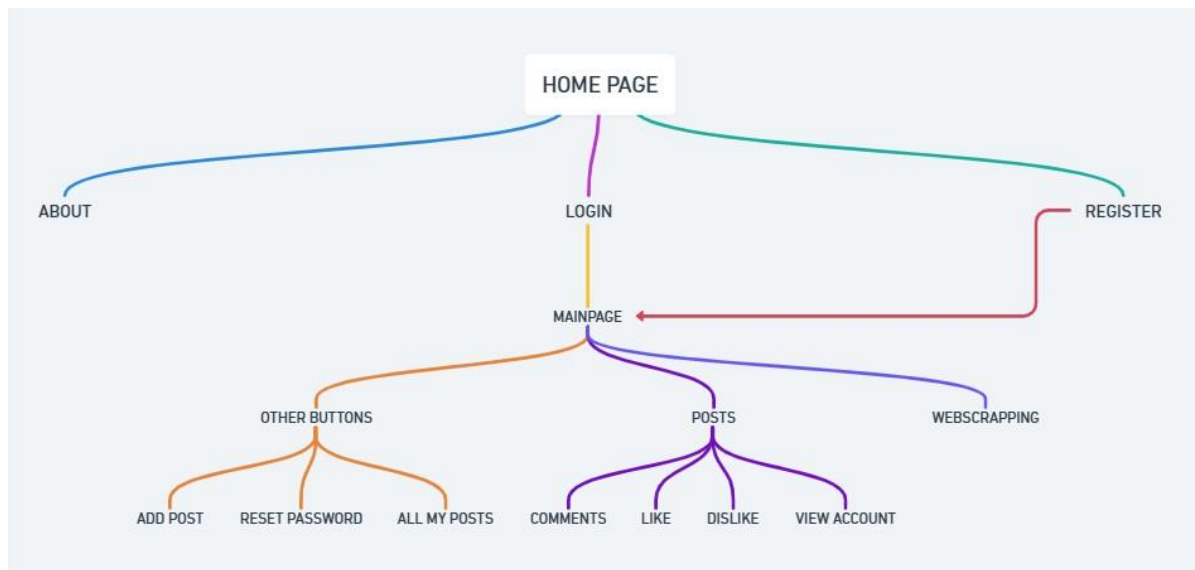
## **User-defined function:**

1. Sqlquery(data) ---->allows client to execute any sql statement in the server and returns output of query
2. Load\_key()----->loads secure private key for encryption
3. Encrypt\_message(message)----->encrypts a message
4. Decrypt\_message(message)----->decrypts a message
5. Getweights(topics)----->returns weights taking into account liked and disliked hashtags
6. Run()----->runs a set of cmd commands to install necessary packages and modules
7. Scrape(topic\_name)----->scrapes the web for the latest news and article headlines about the given topic
8. User\_insertion(username,password,topics) ---->creates a new user with specified details in the server database
9. Getid(username)----->returns userid with username

10. `get_hashtags(post_id)`----->returns all the hashtags for a corresponding postid
11. `returnpostid_hashtag(hashtag)`----->returns postid for a corresponding set of hashtags
12. `return_hashtags_with_username(username)`-----  
>returns the liked hashtag associated with a username
13. `return_dislikedhashtags_with_username(username)`-----  
>returns the disliked hashtag associated with a username
14. `getpassword(username)`----->returns the password with a given username
15. `gettopics(username)`----->returns top 3 liked topics of a user
16. `getpostwithid(id)`----->returns the contents of a post with the postid
17. `getuserposts_everyone()`----->returns all the posts created by all the users in the database
18. `getuserposts_postid(post_id)`----->returns post contents with postid
19. `getallposthashtagandpostid()` à returns all the postid and hashtags of all the users in the database
20. `checkinitialization()`----->a set of initialisation commands to get things working for new users that just registered
21. `gethashtagwithpost(post)`----->returns hashtag with the corresponding contents of a post
22. `installation( )`à used to set up and create database in a new server if needed in the future
23. `new_user(username)`----->internal function that adds the data of a new user across a few other tables in the database

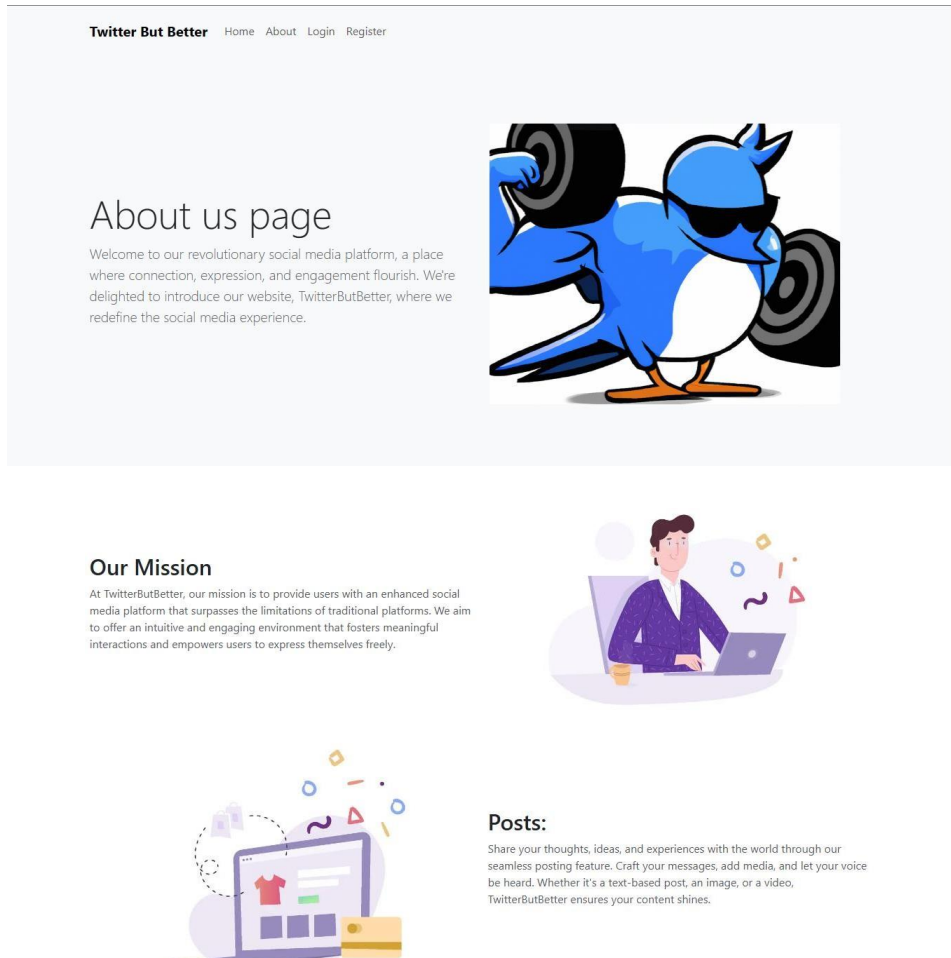
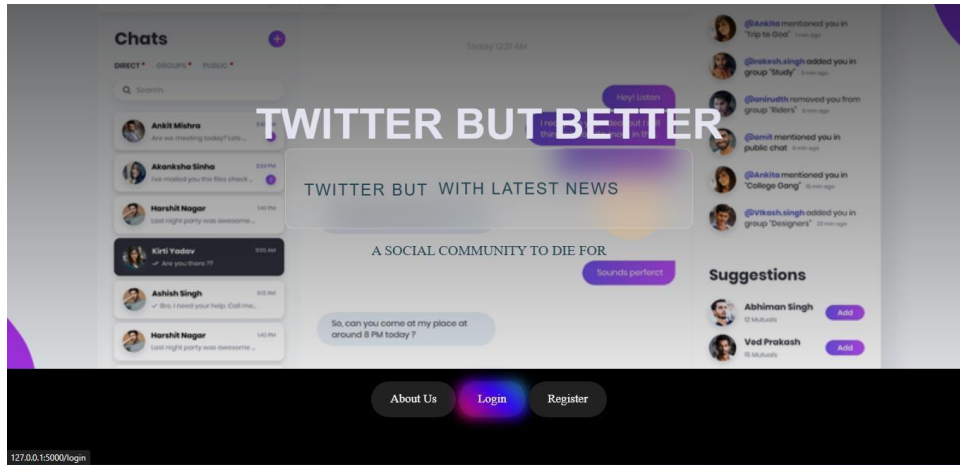
24. `gettags(postid)`----->returns the tags for a post with the postid
25. `add_tags_to_user(username,tags)`----->appends a series of hashtags to a user in the users profile created internally
26. `top_topics(username)`----->returns the list of most liked topics by a user in order (most liked to least liked)
27. `disliked_post(tag,username)`----->appends a series of disliked hashtags to a user in the users profile created internally
28. `auth(username,password)`----->check if the pair of username and password match and authenticates the user
29. `getposts(username)`----->returns all the post given by a user
30. `insertpost(username,postcontents,posttags)` ---- >used to insert the contents of a new post created by a user into the database taking in few necessary details as parameters
31. `find_posttags_with_postcontent(postcontent)`----->returns the tags associated with the contents of a post
32. `finduser(username)`: returns if the username is taken or not.

# FLOW DIAGRAM





# OUTPUT



### Comments:

Engage in lively discussions and connect with like-minded individuals through our robust commenting system. Share your opinions, ask questions, or offer support, all while encouraging constructive conversations that deepen connections.



### Like:

Show appreciation for posts that resonate with you by liking them. The like button allows you to express your support, encouraging content creators and helping surface popular content across the platform.

### Intelligent Feed:

Our intelligent feed utilizes advanced algorithms to curate a personalized experience tailored specifically to your interests. By learning from your interactions, preferences, and engagement patterns, our feed algorithm surfaces the most relevant and engaging content, ensuring you never miss out on updates from your favorite creators.



### Recommendation Engine:

Discover new voices, communities, and content that align with your interests through our cutting-edge recommendation engine. Based on your activity and preferences, our engine suggests accounts, topics, and conversations that you might find intriguing, broadening your horizons and introducing you to fresh perspectives.

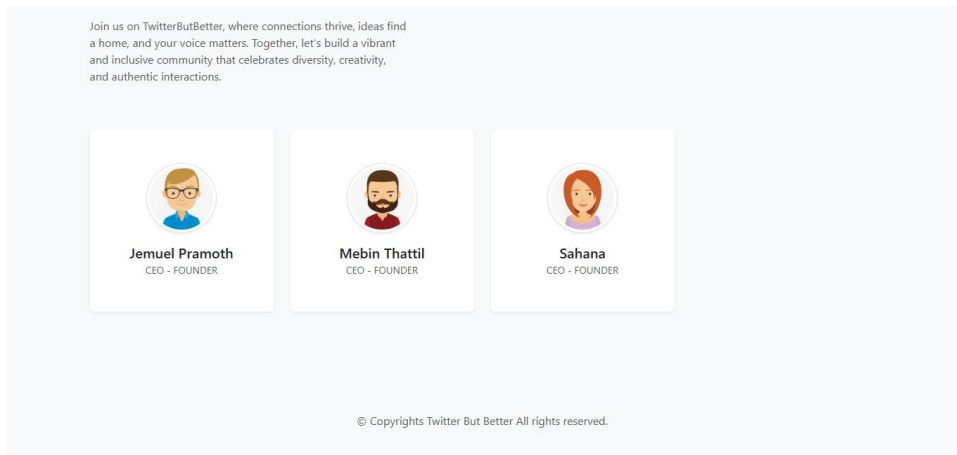
## Our team

Our passionate team of developers has dedicated countless hours to creating TwitterButBetter, infusing it with innovation and user-centric design. We believe in the power of technology to foster positive change, and our goal is to provide an exceptional social media experience for everyone.

Led by experienced professionals in the field, our development team boasts a diverse range of skills and expertise. We are committed to continuously refining and improving our platform, actively listening to user feedback, and implementing innovative features to make TwitterButBetter the go-to social media platform.

Join us on TwitterButBetter, where connections thrive, ideas find a home, and your voice matters. Together, let's build a vibrant and inclusive community that celebrates diversity, creativity, and authentic interactions.





Register

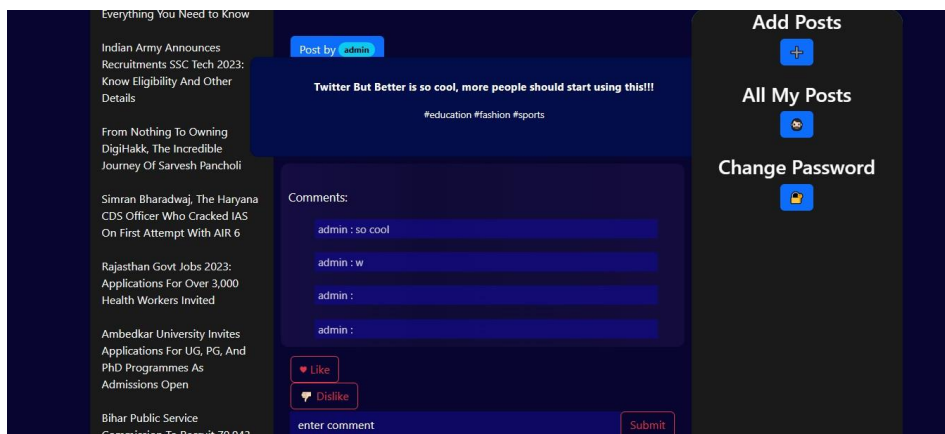
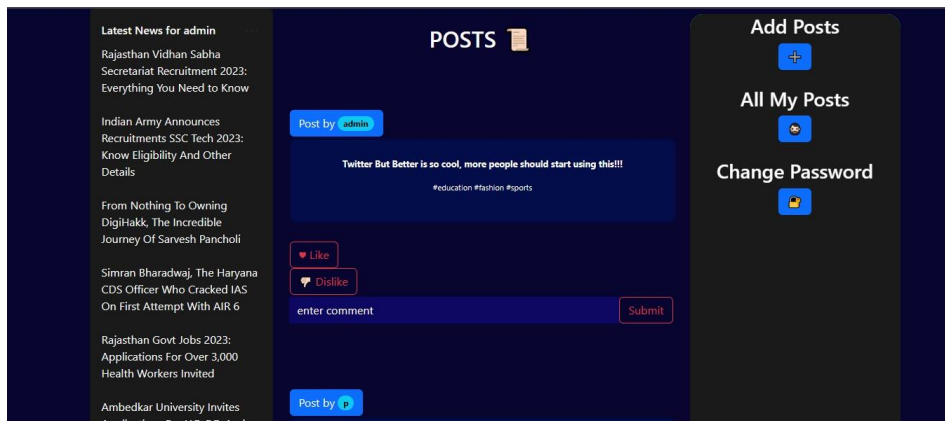
Create Account

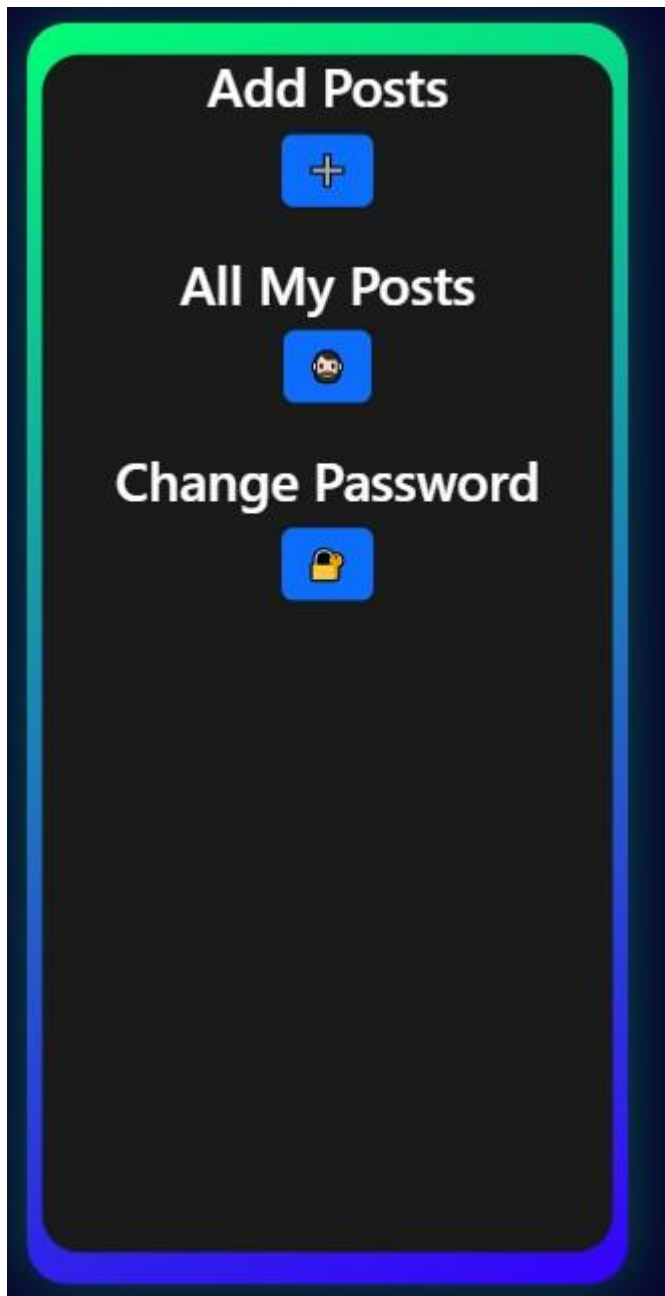
[Already registered? Login](#)

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Login

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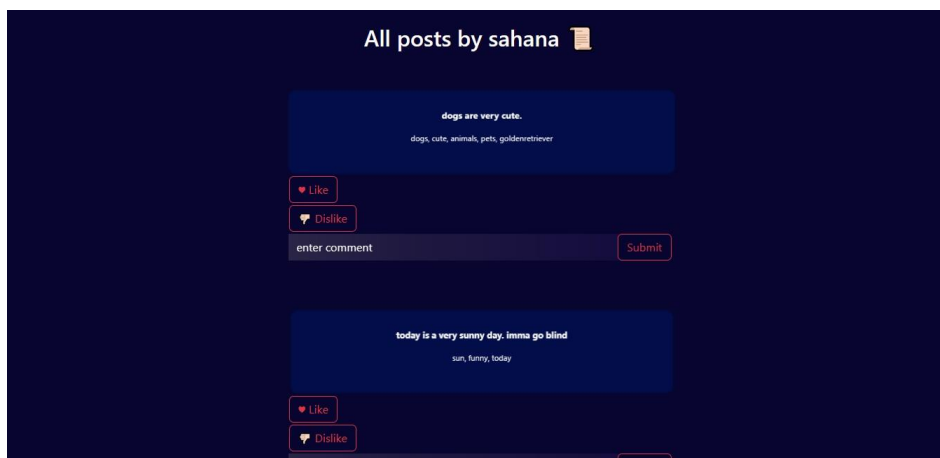
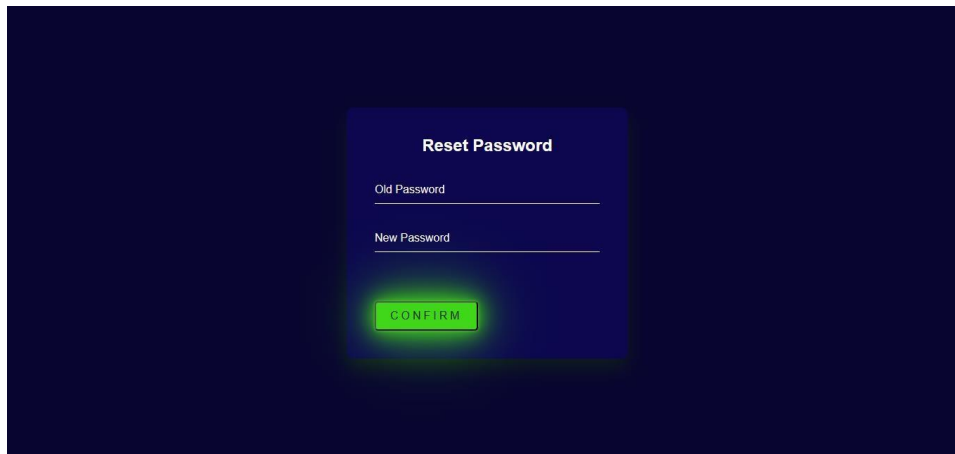
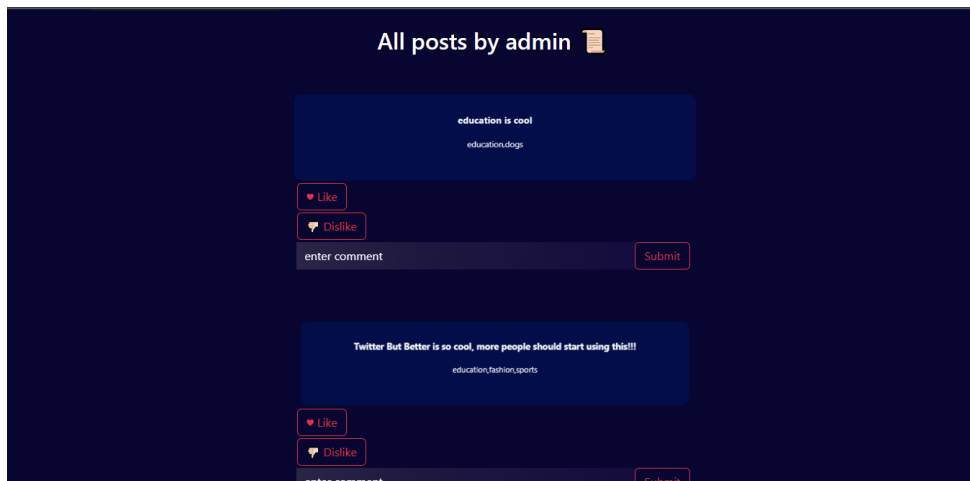
Post Contents

write your post here

Post tags

insert your post tags seperated by ','

Submit



# **LIMITATIONS**

- As opposed to most social media frameworks, the sharing of images, audio and video is not possible.
- Web scraping content has not been filtered for users of all ages, viz. Children.

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