CSC32200: Team E

Mini Twitter
Software Requirements Specification
For Development

Version 2.0

Revision History

Date	Version	Description	Author
10/24/23	1.0	phase 1 report for mini twitter	Maoxi Xu Zhuowen zhong Gaoqiang Zhou
11/21/23	2.0	Report 2 with design for the project	Maoxi Xu Zhuowen Zhong Gaoqiang Zhou

Team E

Table of Contents

Software Requirements Specification

1.Introduction

an overall picture of the system using collaboration class diagram
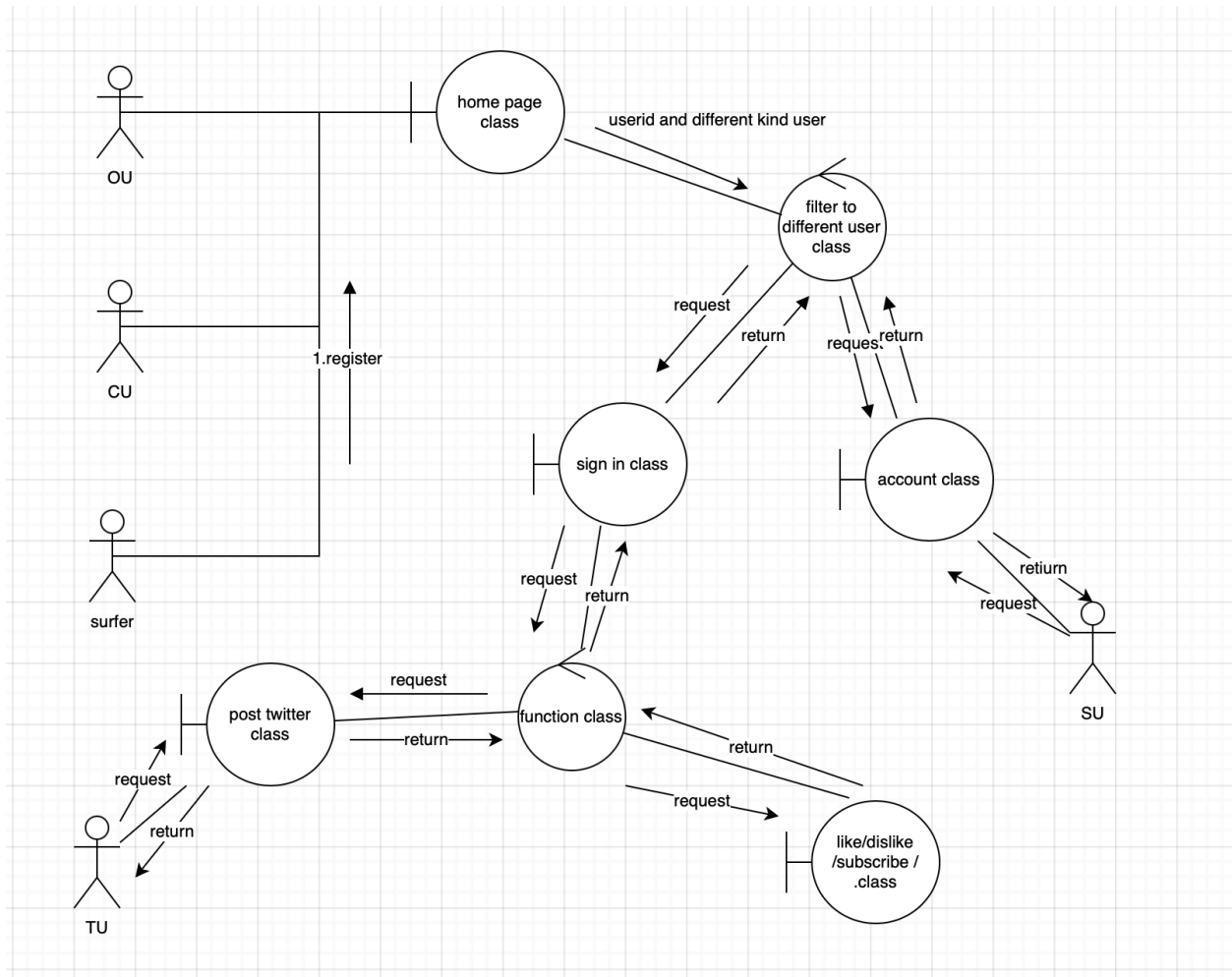
2.All use case

o Scenarios for each use case: normal AND exceptional scenarios
o Collaboration or sequence class diagram for each use case, choose 3 or more use cases:
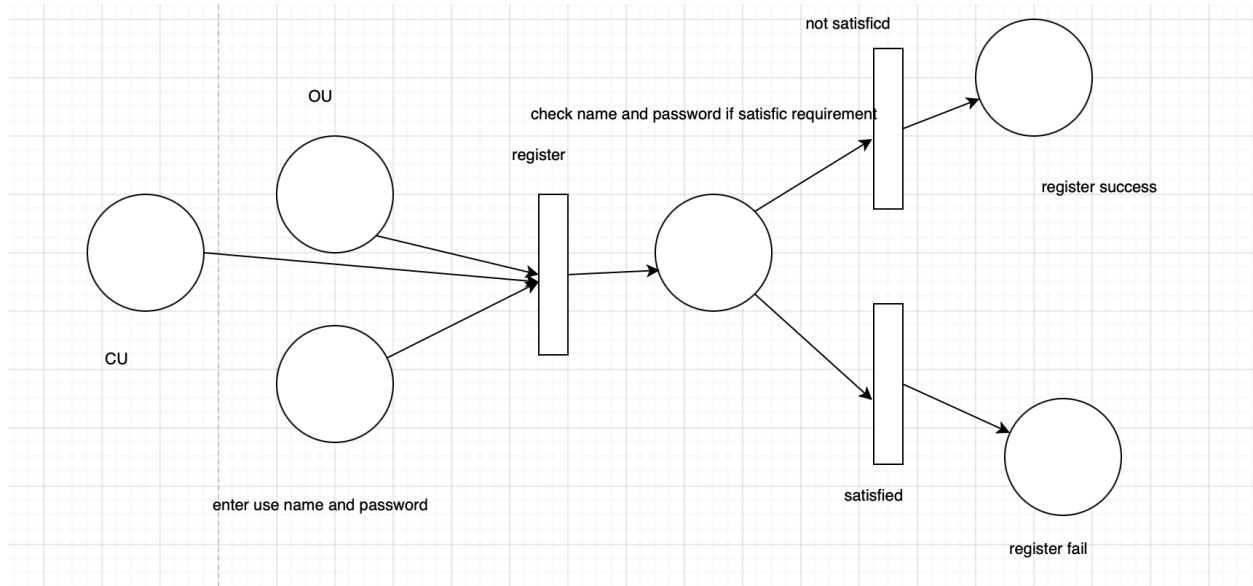draw the Petri-nets instead of class diagrams

Register:
Normal Scenario:
      OU input the username and password then it can register success

Exceptional scenario:

The username too long or password too short will can't register
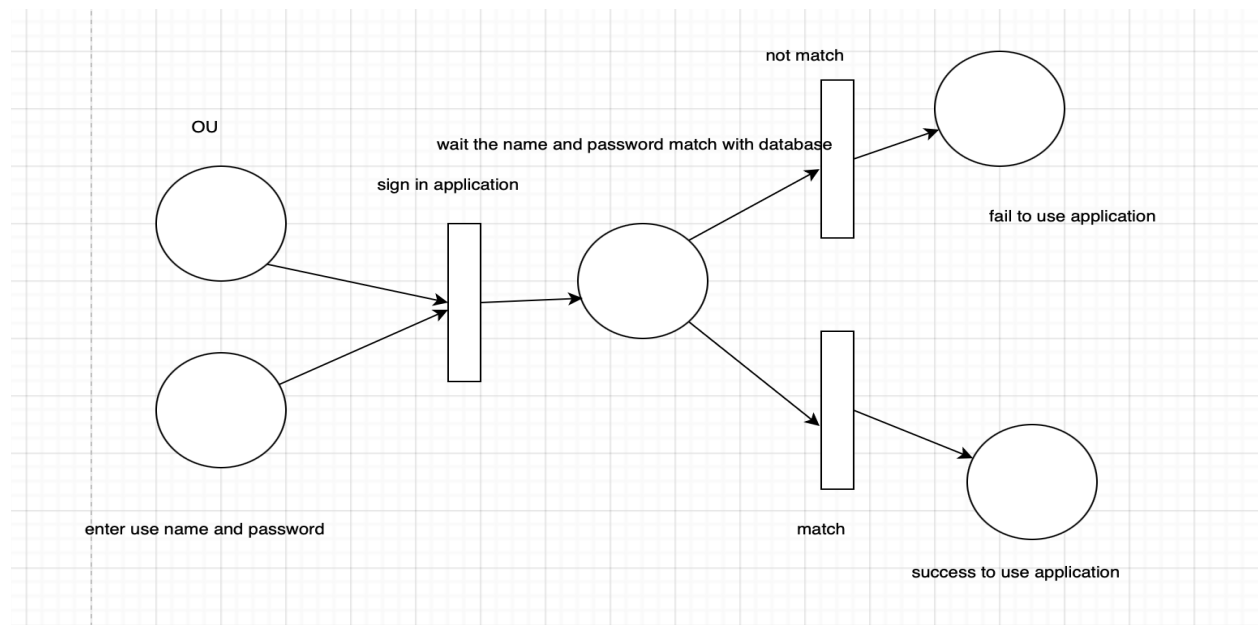

Sign in

Normal Scenario:

OU in put the username and password then it can login in the system

Exceptional scenario:

The username and password can't match it will not able to login in the system

Post twitter
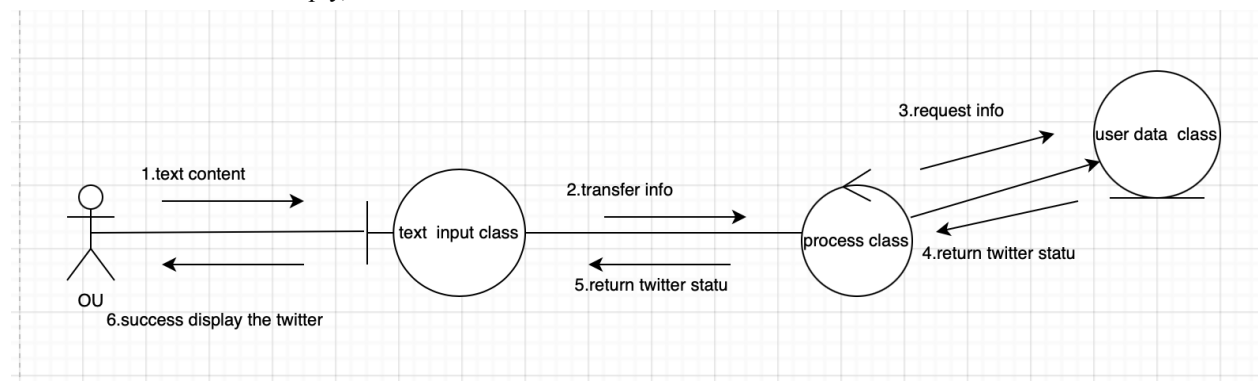
Normal Scenario:

Text content and click submit, then you will see a twitter display

Exceptional scenario:

If the content is empty, will not able to submit a twitter
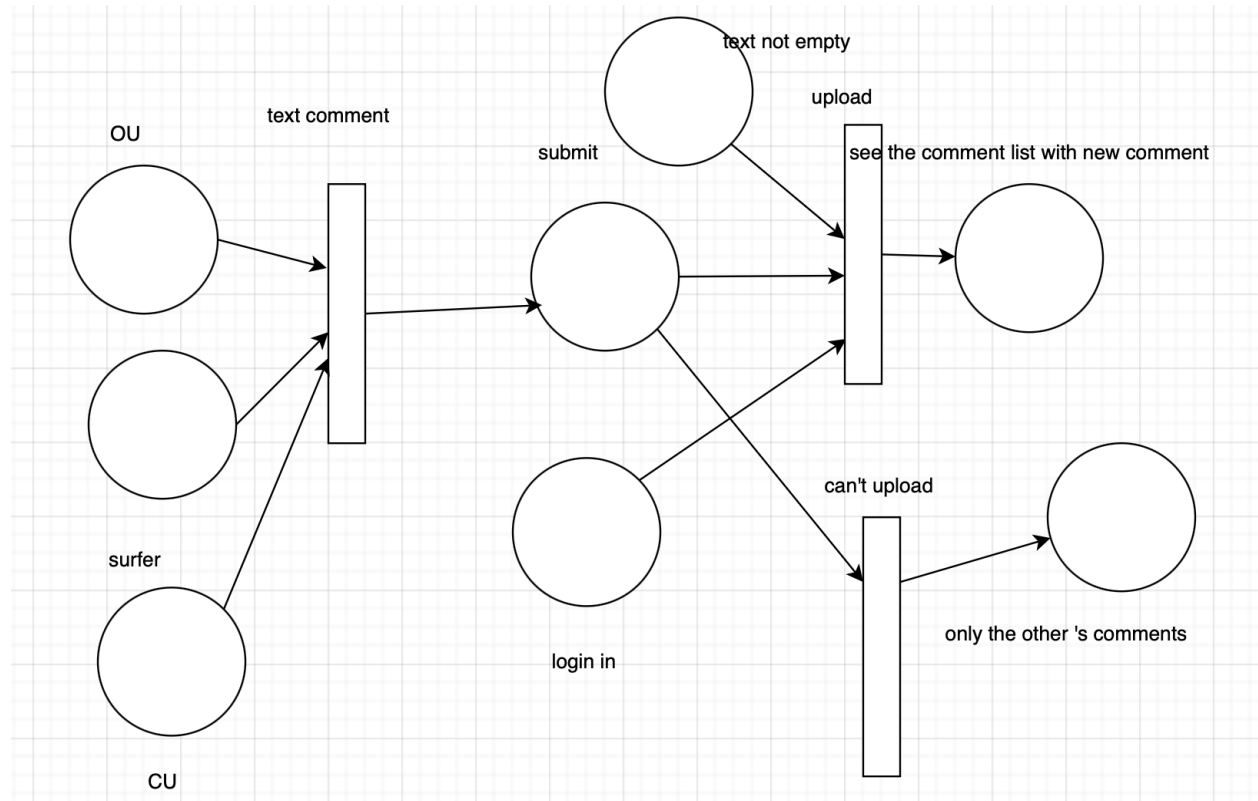

Comment and show the all comment

Normal Scenario:

Click the comment button and show the comment and you can write a comment and submit, when you submit ,you will see your comment in the comment list

Exceptional scenario:

If you did't login in the system, you will not able to comment, you can see the comment but can't to comment the twitter.

Subscribe/unsubscribe
    Normal Scenario:
When user login in their account, they can subscribe or unsubscirbe the user
    Exceptional scenario:
If not login in their account, then will not show a subscribe mark, and can't subscribe user
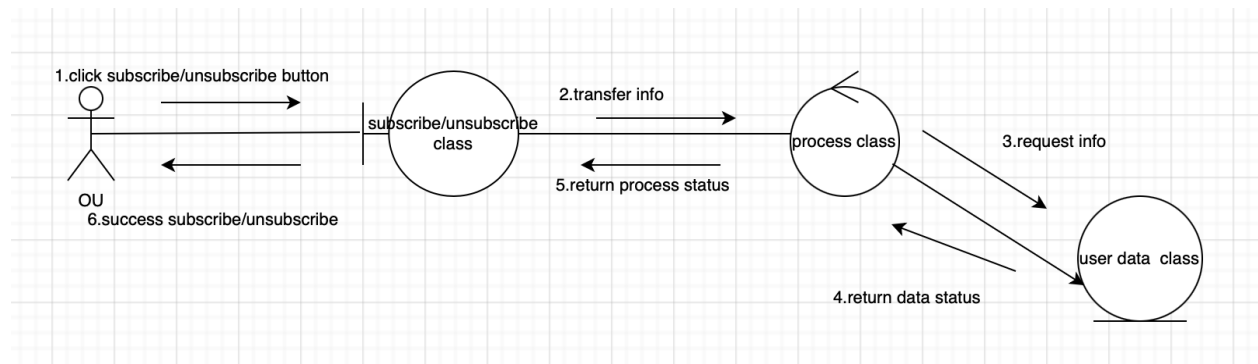
like/dislike
    Normal Scenario:

When user login in their account, they can click the button to dislike user's twitter
      Exceptional scenario::
If not login in their account, then will not able to like or dislike
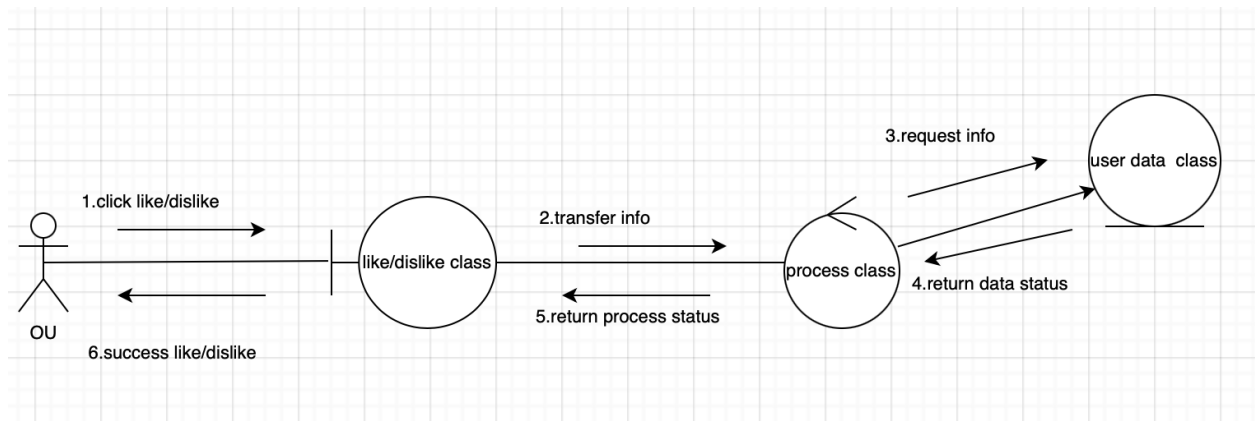
For the CU add ad and job open
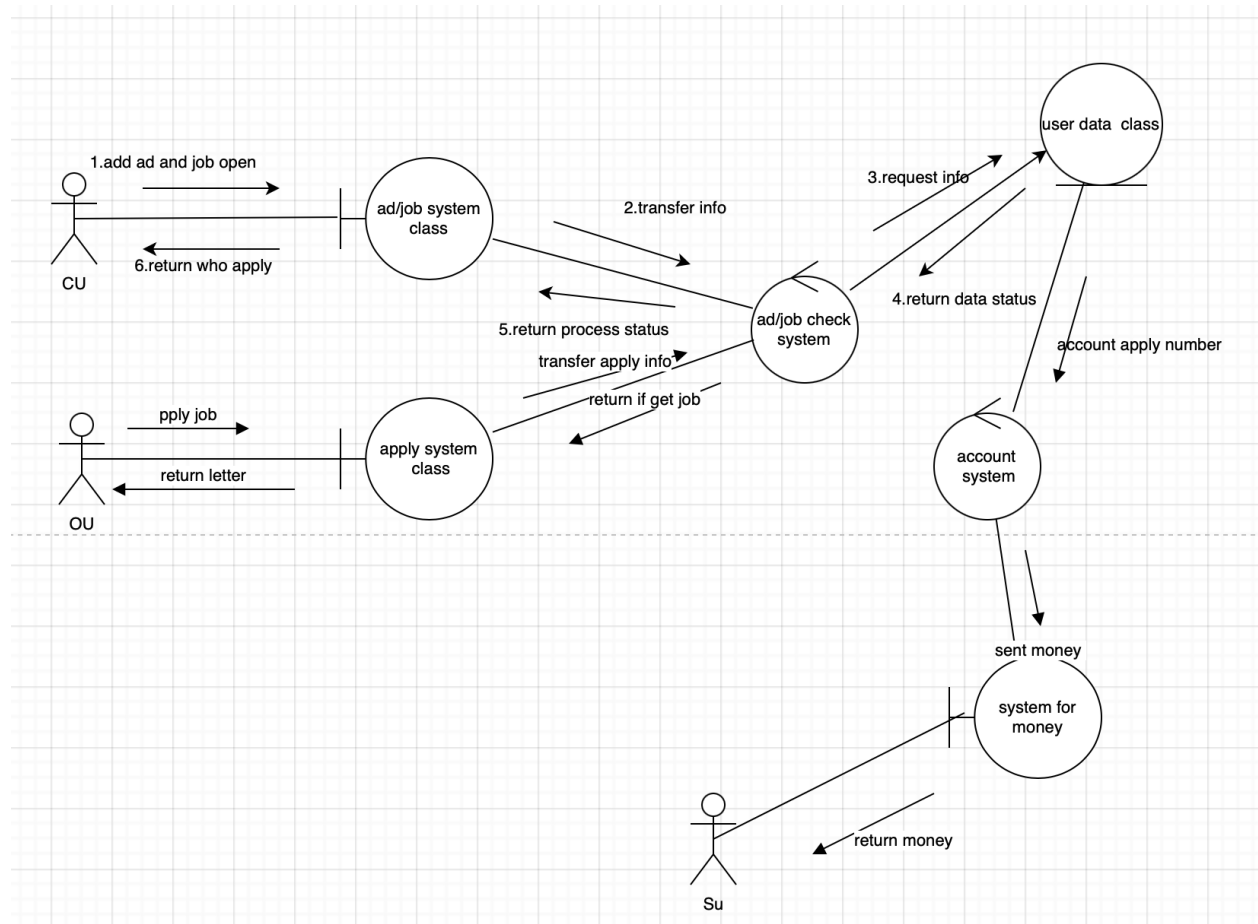   Normal scenario: CU add ad and job open and each and pay 0.1 to su for each click to apply

3.E-R diagram for the entire system
attributes and key for each class should be provided
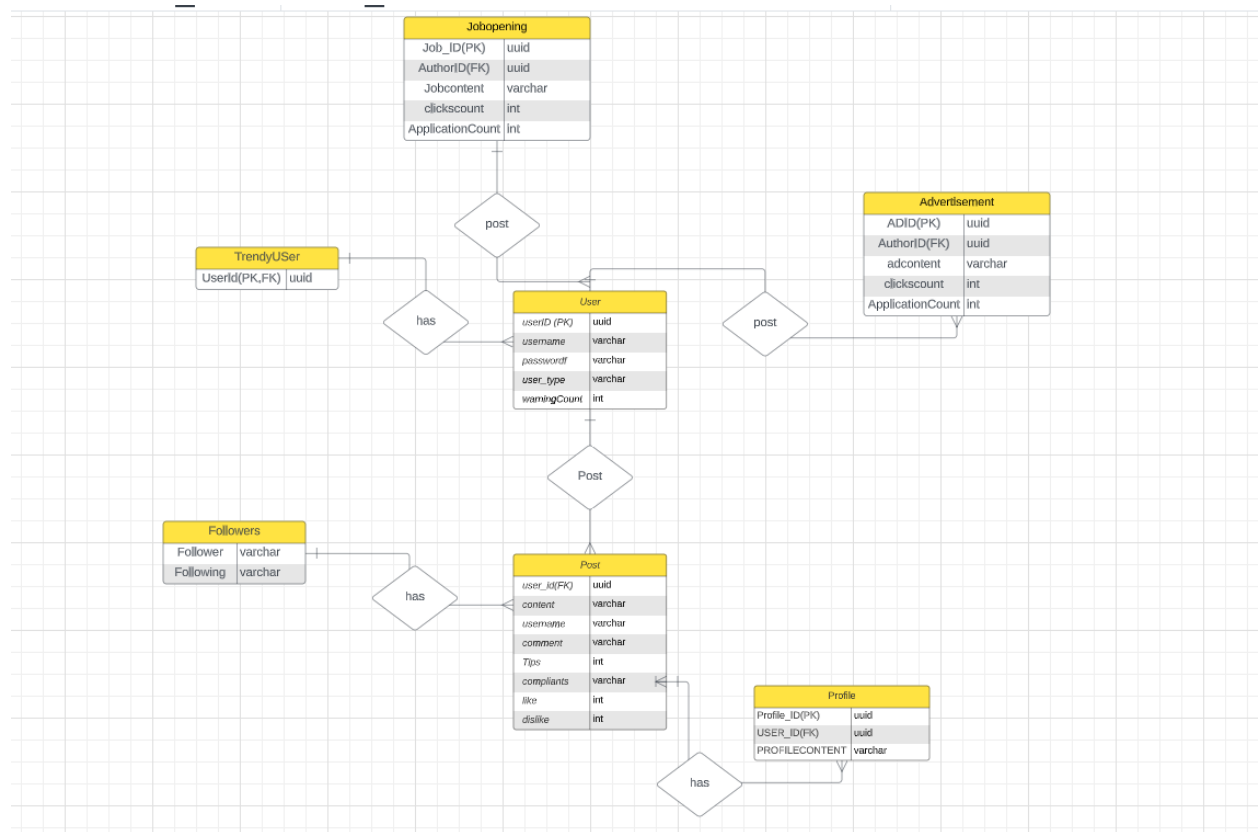
4.Detailed design
for EVERY method use pseudo-code to delineate the input/output and main functionalities

function signUp() {

Extract the input of username, and password

Try to create new user in database if (username, and password) is true also the password length is less than 8 will be failed and it will get an message: password is too short.

Catch error if the user was failed to be created

}

function user Login() {

Extract username and password from text input Try to find the user in the database with these credentials and log them in if found

Catch the error that is thrown if they're not found
}


```
function post_message():
 message_length = calculate_message_length(message)
   if message_length <= 20:
      # Post message for free
      post_message(message)
   else:
      # Calculate cost for the message
      cost = calculate_message_cost(message_length)
    if self.account_balance >= cost:
       # Post message and deduct the cost from the account balance
       post_message(message)
       self.account_balance -= cost
     else:
        # Issue a warning and redirect to the payment page
        issue_warning("Insufficient funds. Please add credit.")
        redirect_to_payment_page()
}
```

```
function calculate_message_length():{
# Count words, images, and videos in the message
# For simplicity, assume words, images, and videos are counted separately
 return word_count(message) + 10 * image_count(message) + 15 video_count(message)
}
```

```
function calculate_message_cost(message_length){
# Calculate cost based on the formula: (# - 20) * $0.1
return max(0, (message_length - 20) * 0.1)
}
```


```
function billing system(user) {
```

```
method: bill_user (user, message.length)
      if user.type =  'CU'
      amount = message_length *1
Catch error if user not found
}

function warningSystem(user){
        method: dispute_waring(user)
        #logic to handle waring dispute
        method:
        handle_dispute_result(user,
        dispute_result)
             if dispute_result == 'win':
                remove_warning(user)
                  elif dispute_result ==
        'initiated':
                   warn_initiator(user)
           elif dispute_result == 'surfer':
                   reward_surfer(user)
                   elif dispute_result ==
        'outstanding_warnings':

        handle_outstanding_warnings(u
        ser)
}

function ads and job posting (){
```

allows Corporate Users (CU) to promote their content within the messaging system, generating revenue for the system while providing opportunities for users to explore ads and job openings. Then the cost per click and cost per application are defined $0.1 per each.
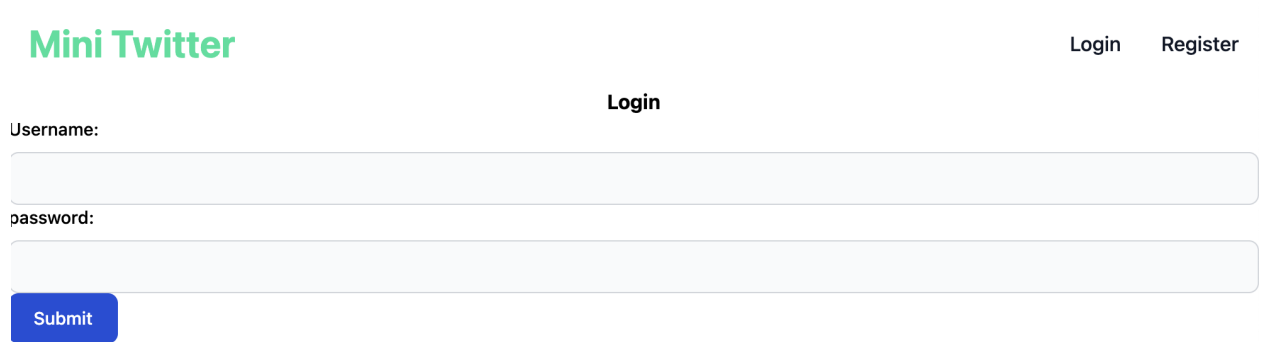
}

5.System screens

demonstrate major GUI screens of the system and a sample prototype of one functionality of your own choice.

Login Page

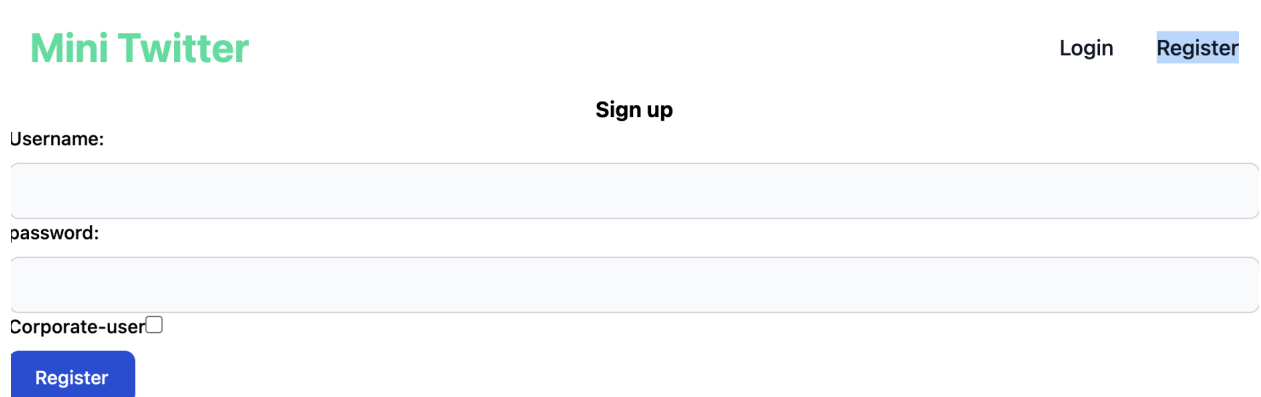**Mini Twitter**   Login   Register

Login

Username:

[   ]

password:

[   ]

Submit

SignUp page

Mini Twitter   Login   Register

Sign up

Username:

[   ]

password:

[   ]

Corporate-user ☐

Register

Right now, we can sign up as a corporate-user.

HomePage

Mini Twitter

chris
logout

What's happening?

🖼 Add photos or videos

Tweet

admin
4
❤ 💔 💬 📹
Like 23 Dislike 14 Comment(7) Tip

benji
hello
❤ 💔 💬 📹
Like 3 Dislike 2 Comment(6) Tip

benji
fda
❤ 💔 💬 📹
Like 0 Dislike 0 Comment(12) Tip

Right now, we can login to the homepage, then we can post, like, dislike, subscribe and comment.

6.Memos of group meetings and possible concerns of team work

No teamwork concerns so far. Everyone has been working on their tasks, helping each other and communicating any issues. We did not have a strict schedule as long as we met the deadlines. Thus we allow flexibility and adjust to accommodate other member's schedules.

Meeting	Date	Note
1	09/23	Initial planning, discuss the general planning of project
2	10/19	Detailed Planning, discuss the functionalities, features, and database for the system

7.Address of the git repo

Address of the git repo (github, gitlab, bitbucket, etc) of your team's work so far - put all materials including this report there

https://github.com/gaoqiangzhou/miniTwitter