

**GTU Department of Computer Engineering**  
**CSE 222 - Spring 2023**  
**Homework 1 Report**

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## **1-System Requirements**

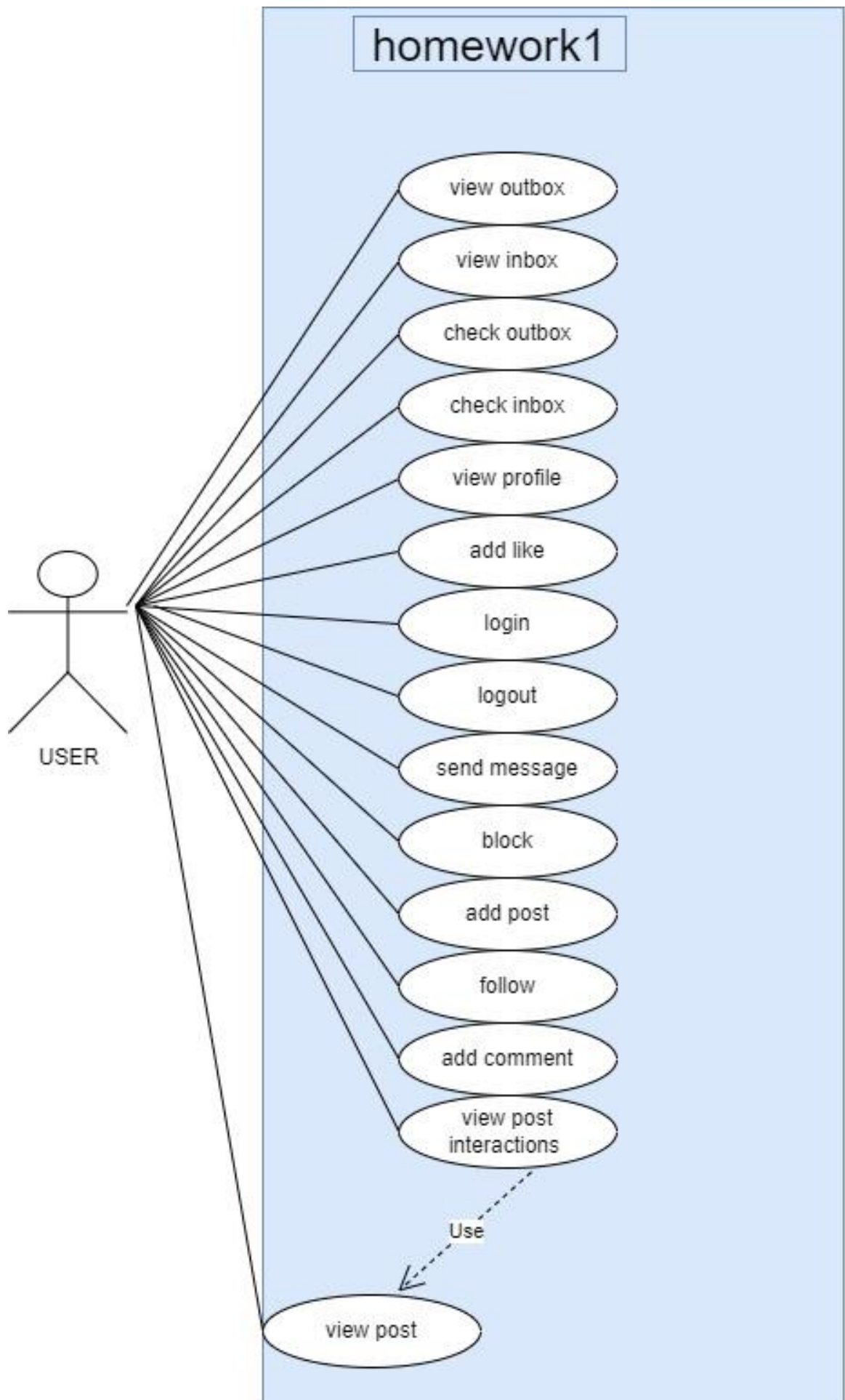
- Each account has a profile which contains username, birth date, location, posts (if exists), follower accounts (if exists), following accounts (if exists).
- Each account can follow or be followed by another accounts. The number of following/follower accounts can vary from zero to many.
- In order to do the following actions, the user must log into their accounts.
  - o Following another account
  - o Viewing the profile of another account (in order to view the profile, there is no need to follow the account.)
  - o Sharing a post.
  - o Interacting with a post which belongs to another account.
  - o Sending a message to another account (in order to send a message, the account must be followed.)
- The interaction with a post of another account can be as a like or a comment.
- The interaction information (number of likes/comments, the accounts that liked/commented, the content of the comments) of each post can be viewed by all users.

## 2-Diagrams

### a. Use Case Diagram



***b. Class – UML Diagram***



### **3-PROBLEM SOLUTION APPROACH**

- Because of the prohibition of static variables, I created a method called 'emptyIndex' to add a object to the next empty index of an array.

### **4-TEST CASES**

- SCENARIO 1 :
  - Step 1: Create 3 accounts with usernames “gizemsungu”, “sibelgulmez”, and “gokhankaya”.
  - Step 2: Login to the account with username “sibelgulmez”.
    - o Step 3: Share two posts.
    - o Step 4: Follow “gizemsungu” and “gokhankaya”.
    - o Step 5: Log out from the account.
  - Step 6: Login to the account with username “gokhankaya”.
    - o Step 7: View “sibelgulmez”'s profile.
    - o Step 8: View “sibelgulmez”'s posts.
    - o Step 9: Like a post of “sibelgulmez”.
    - o Step 10: Comment on a post of “sibelgulmez”.
    - o Step 11: Follow “sibelgulmez” and “gizemsungu”.
    - o Step 12: Send a message to “gizemsungu”.
    - o Step 13: Log out from the account.
  - Step 14: Login to the account with username “gizemsungu”.
    - o Step 15: Check the number of messages in the outbox.
    - o Step 16: Check the number of messages in the inbox.
    - o Step 17: View the messages in the inbox.
    - o Step 18: View “sibelgulmez”'s profile.
    - o Step 19: View “sibelgulmez”'s posts.
    - o Step 20: View “sibelgulmez”'s posts' interactions.
    - o Step 21: Like “sibelgulmez”'s posts.
    - o Step 22: View “sibelgulmez”'s posts' interactions.

- SCENARIO 2 :

- “gizemsungu” logs in. a. shares a post (let’s call it Post1).
  - shares another post (let’s call it Post2).
  - logs out.
- 2. “sibelgulmez” logs in. a. views the profile of “gizemsungu”.
  - likes Post1.
  - logs out.
- 3. “gokhankaya” logs in. a. views the profile of “gizemsungu”.
  - comments on Post2 (ex: Nice!).
  - sends a message to “gizemsungu” (ex: “Hello!”)
  - logs out.
- 4. “gizemsungu” logs in. a. views her own profile.
  - reads the message from “gokhankaya”.

- SCENARIO 3

- 1. “gizemsungu” logs in. a. blocks “sibelgulmez”.
  - logs out.
- 2. “sibelgulmez” logs in. a. tries to view the profile of “gizemsungu”.
  - b. tries to send a message to “gizemsungu”.

## **5-RUNNING AND RESULTS**

### **SCENARIO 1:**

```
STEP 1...
An account with username gizemsunguhas been created...
An account with username sibelgulmezhas been created...
An account with username gokhankayahas been created...

*****

STEP 2...
Login into an account (username : sibelgulmez)...
STEP 3...
Being shared a post from an account named sibelgulmez
Sharing posts...
Being shared a post from an account named sibelgulmez
Sharing posts...
STEP 4...
An account named gokhankaya has been followed...
An account named gizemsungu has been followed...
STEP 5...
Logout of an account (username : sibelgulmez)...

*****

STEP 6...
Login into an account (username : gokhankaya)...
STEP 7...
Viewing account...
-----
accountId is : 2
location is : istanbul
username is : sibelgulmez
birth date is : 10.03.1800
There is not any followers of this account.

sibelgulmez is following 2 account(s) and has 0 follower(s)
sibelgulmez is following : gokhankaya gizemsungu
sibelgulmez has 2 post(s)
STEP 8...
Viewing posts ...
-----
(Post ID : 1) sibelgulmez:This is my first post guyysss!!

(Post ID : 2) sibelgulmez:This is my second post and Im not excited now :(

STEP 9...
gokhankaya liked the post with content : This is my first post guyysss!!
STEP 10...
Commenting the post with content : This is my first post guyysss!!
STEP 11...
An account named gizemsungu has been followed...
An account named sibelgulmez has been followed...
STEP 12...
Message is sent!
STEP 13...
Logout of an account (username : gokhankaya)...
```

```
STEP 14...
Login into an account (username : gizemsungu)...
STEP 15...
...Checking inbox...
-----
There is/are 1 message(s) in the inbox
STEP 16...
.....Checking outbox.....
-----
There is/are 0 message(s) in the outbox
STEP 17...
...Viewing inbox...
-----
Message : content= 'Hey gizem, look how funny the comment I made to sibel's post
'senderUserName='gokhankaya'
'receiverUserName='gizemsungu'

STEP 18...
Viewing account...
-----
accountId is : 2
location is : istanbul
username is : sibelgulmez
birth date is : 10.03.1800
The followers of sibelgulmez are :gokhankaya
sibelgulmez is following 2 account(s) and has 1 follower(s)
sibelgulmez is following : gokhankaya gizemsungu
sibelgulmez has 2 post(s)
STEP 19...
Viewing posts ...
-----
(Post ID : 1) sibelgulmez:This is my first post guyysss!!

(Post ID : 2) sibelgulmez:This is my second post and Im not excited now :(

STEP 20...
Viewing post interactions
-----
(Post ID : 1) This is my first post guyysss!!.
The post was liked by the following account(s) : gokhankaya,
The post has 1 comment(s)
Comment 01 : ( from : gokhankaya )Keep calm sibel, it is not that exciting :|,
(Post ID : 2) This is my second post and Im not excited now :(.
The post has no likes
The post has no comments
Viewing posts ...
-----
(Post ID : 1) sibelgulmez:This is my first post guyysss!!

(Post ID : 2) sibelgulmez:This is my second post and Im not excited now :(

STEP 21...
gizemsungu liked the post with content : This is my first post guyysss!!
STEP 22...
Viewing post interactions
-----
(Post ID : 1) This is my first post guyysss!!.
The post was liked by the following account(s) : gokhankaya, gizemsungu,
The post has 1 comment(s)
Comment 01 : ( from : gokhankaya )Keep calm sibel, it is not that exciting :|,
(Post ID : 2) This is my second post and Im not excited now :(.
The post has no likes
The post has no comments
Logout of an account (username : gizemsungu)...

*****
```



## SCENARIO 2 :

```
STEP 23...
Login into an account (username : gizemsungu)...
STEP 24...
Being shared a post from an account named gizemsungu
Sharing posts...
Being shared a post from an account named gizemsungu
Sharing posts...
STEP 25...
Logout of an account (username : gizemsungu)...
STEP 26...
Login into an account (username : sibelgulmez)...
STEP 27...
sibelgulmez liked the post with content : Guys, can you tell am I gonna pass cse222 class
STEP 28...
Logout of an account (username : sibelgulmez)...
STEP 29...
Login into an account (username : gokhankaya)...
STEP 30...
Viewing account...
-----
accountId is : 1
location is : istanbul
username is : gizemsungu
birth date is : 10.03.1900
The followers of gizemsungu are :sibelgulmez gokhankaya
This account does not following any account.
gizemsungu has 2 post(s)
STEP 31...
Commenting the post with content : at least I like Java
STEP 32...
Message is sent!
STEP 33...
Logout of an account (username : gokhankaya)...
STEP 34...
Login into an account (username : gizemsungu)...
STEP 35...
Viewing account...
-----
accountId is : 1
location is : istanbul
username is : gizemsungu
birth date is : 10.03.1900
The followers of gizemsungu are :sibelgulmez gokhankaya
This account does not following any account.
gizemsungu has 2 post(s)
STEP 36...
...Viewing inbox...
-----
Message : content= 'Hey gizem, look how funny the comment I made to sibel's post
'senderUserName='gokhankaya'
'receiverUserName='gizemsungu'

Message : content= 'Hello!
'senderUserName='gokhankaya'
'receiverUserName='gizemsungu'
```

## SCENARIO 3 :

```
STEP 37...
gizemsungu has blocked an account named sibelgulmez
STEP 38...
Logout of an account (username : gizemsungu)...
STEP 39...
Login into an account (username : sibelgulmez)...
STEP 40...
You can not view this account because this account has blocked you. :(
STEP 41...
You can not send a message to this account because this account has blocked you. :(
```