Hacettepe University

Computer Science and Engineering Department

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COURSE	BBM203
EXPERIMENT	Assignment III
SUBJECT	A hypothetic Twitter App / Linked Lists & OOP
DUE DATE	30.11.2015
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1.ALGORITHM

1.Open and read "input.txt" file with take_inputs() functions and return input lines with a vector.

2.For Loop

> **2.1**.If there is "AddUser"
>
> > **2.1.1**.Call AddUser() function from System class and If there is not a same user in the Users list add the new user in the Users list.return the related sentence in output vector.
> >
> > **2.1.2.**Else return an error message in output file
>
> **2.2.**If there is "FollowUser"
>
> > **2.2.1.**Call the FollowUser function in User_Control header file
> >
> > > **2.2.1.1.**Control the errors.If there is a invalid situation return an error message in output vector
> > >
> > > **2.2.1.2.**Else do follow operation and return the related sentence in output vector.
>
> **2.3.**If there is "AddPost"
>
> > **2.3.1.**Call AddPost() function in User_Control header file and If there is the user in Users list add new post. Return the related sentence in output vector.
> >
> > **2.3.2.**Else return an error message in output vector
>
> **2.4.**If there is "LikePost"
>
> > **2.4.1.**Call the LikePost() function in User_Control header file.
> >
> > > **2.**4.1.1.Control the errors.If there is a invalid situation return an error message in output vector
> > >
> > > **2.4.1.2.** Else do like operation and return the related sentence in output vector
>
> **2.5**.If there is "ViewPost"
>
> > **2.5.1.** If there is the user in Users list.
> >
> > Call ViewUser() function in User_Control class and write users information and profile in output file. Return the related sentence in output vector
> >
> > **2.5.2.**Else return an error message in output vector

2.6. If there is "Repost"

> **2.6.1.** Call Repost() function in User_Control header file.
>
>> **2.6.1.1.** Control the errors. If there is a invalid situation return an error message in output vector
>>
>> **2.6.1.2.** Else do repost operation and return the related sentence in output vector

2.7. If there is "BlockUser"

> **2.7.1.** Call BlockUser() function in User_Control header file.
>
>> **2.7.1.1.** Control the errors. If there is a invalid situation return an error message in output vector
>>
>> **2.7.1.2.** Else do block operation return the related sentence in output vector.

2.8. If there is "UnfollowUser"

> **2.8.1.** call Unfollow() function in User_Control file.
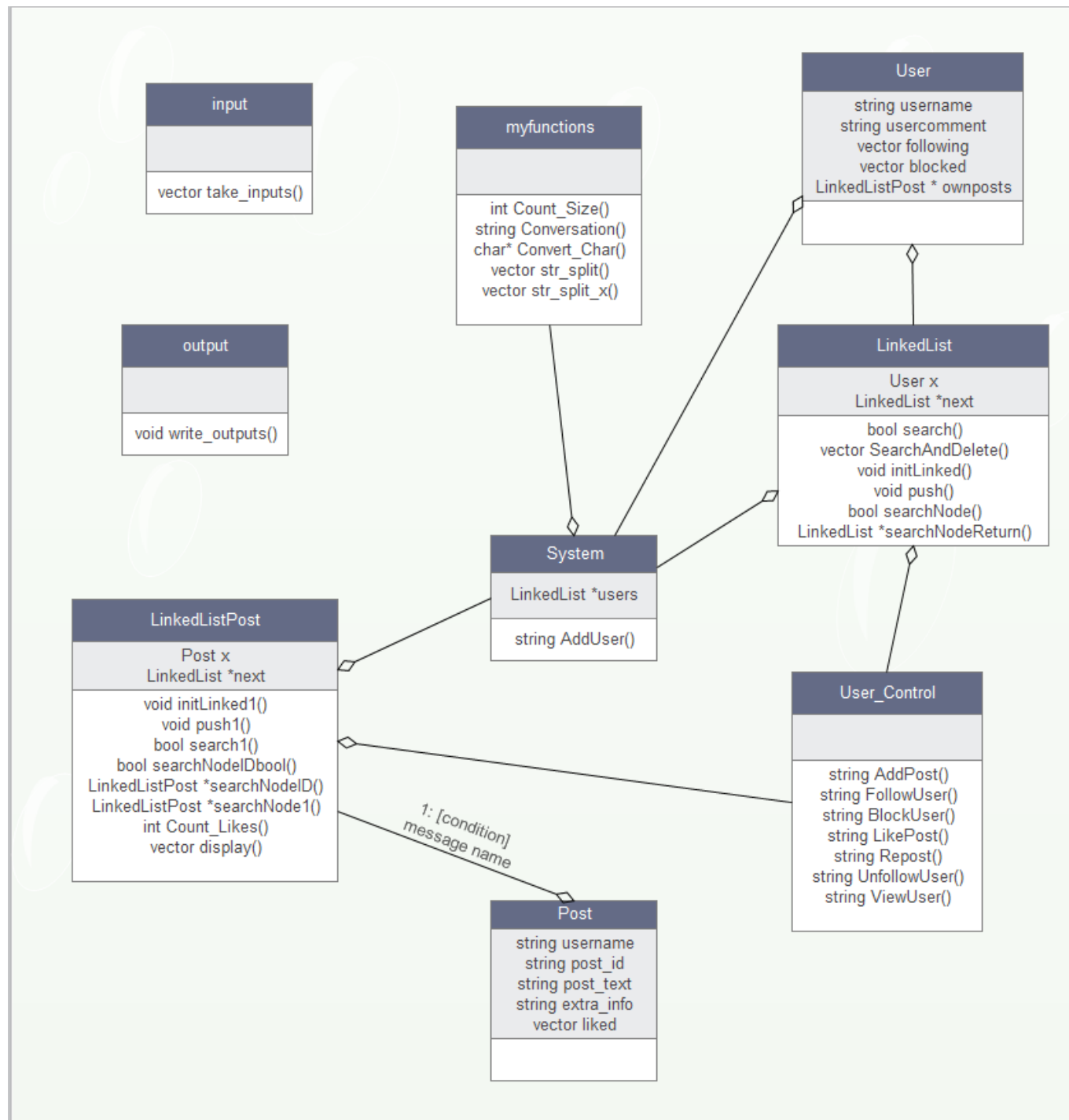>
>> **2.8.1.1.** Control the errors. If there is a invalid situation return an error message in output vector
>>
>> **2.8.1.2.** Else do unfollow operation and return the related sentence in output vector

3. Write the output vector in out.txt files.

4. Free the lists.

2.CLASS DİAGRAM

input

vector take_inputs()

myfunctions

int Count_Size()
string Conversation()
char* Convert_Char()
vector str_split()
vector str_split_x()

User

string username
string usercomment
vector following
vector blocked
LinkedListPost * ownposts

output

void write_outputs()

LinkedList

User x
LinkedList *next

bool search()
vector SearchAndDelete()
void initLinked()
void push()
bool searchNode()
LinkedList *searchNodeReturn()

System

LinkedList *users

string AddUser()

LinkedListPost

Post x
LinkedList *next

void initLinked1()
void push1()
bool search1()
bool searchNodeIDbool()
LinkedListPost *searchNodeID()
LinkedListPost *searchNode1()
int Count_Likes()
vector display()

User_Control

string AddPost()
string FollowUser()
string BlockUser()
string LikePost()
string Repost()
string UnfollowUser()
string ViewUser()

1: [condition]
message name

Post

string username
string post_id
string post_text
string extra_info
vector liked

3.Data Structers

I used Linked List and vector data structers for write my software.I used Linked List basicly.I prefer vector for keep string list in Linked List or other places.Vector is useful fort his.I used Linked List for keep users or posts datas.I wrote my own linked list and list functions so linked list is useful data structers for me.

4.Problems

I create the algorithm easily.But learn the linked list struct was too difficult for me.I do much changes on my code for use right the linked list struct .All structs was connected with each other.It was too complicated for me.But I solved many problem when I started vector data structer.

5.Personal Comment

First off all we can just adding operations in this software.I wish we can some deleting operations.For examples: delete a post from my profile or delete the account from software system vb.

My other comments is tag operations.If we can tag on images or posts with our friends I think software will be more usefull.