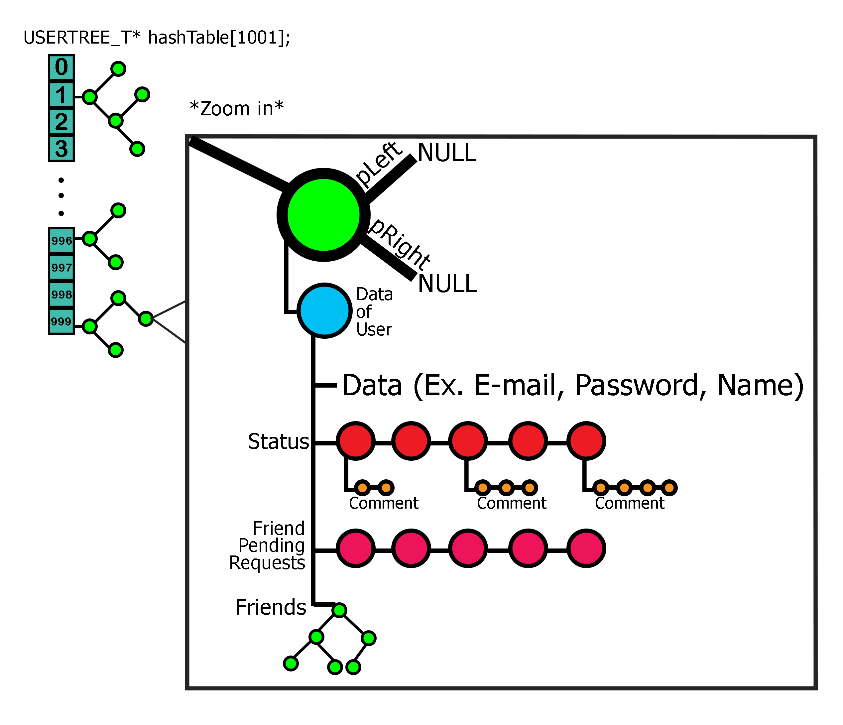


This is our main structure. On a structure (USERTREE\_T), it keeps a user profile in a structure (USER\_T), a level of structure in binary tree (At first, we keep all data in Hash Table. If it happens a collosion, the data will be kept in Binary Tree.), a left child and a right child of node. The figure below shows working diagram of all structures that work each other.



On the structure (USER\_T), it keeps a user profile that includes mail, password, name, phone number, gender, birth date, amount of friend, friend list , pending request to be friend list, the newest status and the oldest status.

On the structure (FRIENDLIST\_T), it keeps a user profile and the next profile. We use the structure for keeping a friend of user and a pending request to be friend in Linked List.

On the structure (STATUS\_T), it keeps a status owner, a status text, a date that we post the status, the lastest comment, the last comment and the next status. We keep all status in Linked List.

On the structure (COMMENT\_T), it keeps a comment owner, a comment text, a date that comment status and the next comment. We keep all comment per status in Linked List.

This program has 3 external files

* Profile file (profileFB.dat)

This file is binary file. It keeps only information of each user. There are mail, password, name phone number, gender and birth date.

**Example of data:**

E-mail: tk@hotmail.com

Password: 123456789tT

Name: Tonkla TK

Phone: 0857651234

Date: 10 10 1995

Gender: M

E-mail: saab007@gmail.com

Password: Saab135792468

Name: Saab Kung

Phone: 0900044267

Date: 20 08 1998

Gender: M

* Relation file (relationFB.txt)

This file is text file. It keeps friend and pending request of each user. In each line of file has tag in front of data to know which data it is. There are 3 tags in this file:

‘USER’ – User that are we are focus on

‘FRIEND’ – Friend of user that we are focus on

‘PENDING’ – Pending request of user that we are focus on

After tag will follow with E-mail.

**Example of data:**

**USER** bammo@cpe.kmutt.ac.th

**FRIEND** saab007@gmail.com

**PENDING** tongsleepy@gmail.com

**USER** saab007@gmail.com

**FRIEND** primmysudcute@hotmail.com

**FRIEND** bammo@cpe.kmutt.ac.th

**PENDING** tongsleepy@gmail.com

**USER** prawproudd@hotmail.com

**PENDING** tongsleepy@gmail.com

**PENDING** bammo@cpe.kmutt.ac.th

**PENDING** [saab007@gmail.com](mailto:saab007@gmail.com)

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* Status file (statusFB.txt)

This file is text file. It keeps all status and comment. In each line of file has tag in front of data to know which data it is. There are 4 tags in this file:

‘STATUS’ – Status text that user update. After this tag will follow with text of status.

‘COMMENT’ – Comment text that user update. This comment will be comment of the latest status that read from file. After this tag will follow with text of comment.

‘MAIL’ – E-mail of owner status or comment. (Depends on the latest tag that can read) After this tag will follow with text of status.

‘DATE’ – Date of status or comment. (Depends on the latest tag that can read) After this tag will follow with date, month, year, hour, and minute.

This data must start with ‘STATUS’ then follow with ‘MAIL’ and ‘DATE’. If that status has comment, it’ll follow with ‘COMMENT’, ‘MAIL’ and ‘DATE’ until every comment and start status again.

**Example of data:**

**STATUS** Hello world

**MAIL** bammo@cpe.kmutt.ac.th

**DATE** 24 5 2018 10 54

**COMMENT** I'm beautiful

**MAIL** bammo@cpe.kmutt.ac.th

**DATE** 24 5 2018 10 57

**COMMENT** Really?

**MAIL** saab007@gmail.com

**DATE** 24 5 2018 11 1

**STATUS** Hi everyone!

**MAIL** tk@hotmail.com

**DATE** 24 5 2018 11 22

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