

Advanced Programming

Assignment 1_Design

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1. The design that will be able to store the profile information

Due to miniNet application could be store different quantities of different types of people profile, we have made 'ArrayList' to store all objects and all people attributes has been encapsulated in every dependent object. At the same time, adults and teenagers can have friends, we have made an additional special attribute to store relational friend object to establish friendship connection for 'Adults' class and 'Teenagers' class. (ArrayList<Teenagers> friendList=null; and ArrayList<Adults> friendList=null;) Especially, adult can have children so that there is an assumption: If an adult has had children and these children may be also adult, teenager or baby. If adult's children are also children, that means this adult is old person, something like 'grandparent' and if are teenager or baby, this adult seems like 'Parent'.

2. Class hierarchy will facilitate the network management

No matter person is adult, teenager or baby, there are some common attributes. Thus, we made 'People' class as super class to keep these attributes. Common attribute:

-username

-status

-sex

-age

-momObj

-dadObj

-photoIma

'Adults' class, 'Teenagers' class and 'Baby' class as sub class to inherit 'People'

class. The constructor of sub class can invoke constructor in super class. And about showing person's information, there is 'showInFor()' method in super class. And every sub class can override this method to add more special attributes in method and use 'super' to invoke print method in super class, that can improve code reuse rate.

3. The process by which your program can maintain the networks and find connections more efficiently.

-No matter person is adult, teenager and baby, there is 'Adults momObj', and 'Adults dadObj' in the constructor. We just put 'adult' reference into there and when put parent information, we can be easy to find out parent object through this reference and print

-Adult can be married or single, if married, it is also to store coupleObj and 'marriedStatus' attribute is 'Married' automatically. If single, 'MarriedStatus' attribute is 'Single'.

-About adult's and teenager's friend, we have made arrayList to store friend objects. Meantime, we thought this friendList is 'null' when initializing. When someone object needs to establish friendship with others and this person does not have friend before, we need to new ArrayList(); for this person. Because although no objects are stored in there, new ArrayList() also seems be implicit to allocate some storages for it. Thus, directly put 'null'. When deleting friendship connection, if someone has no friends after deleting, we should put friendList=null. By the way, adult's friend is also adult, and teenager's friend only is teenager. Thus, we just put <Adults> and <Teenagers> to check the one object will be stored is real adult or teenager.

-About adult's children, we also use arraylist and because adult's children can be an adult, a teenager or a baby, we need to do the judgement when add parent information. If one adult has children and children is also adult, that means this adult cannot add other types of children (Teenagers or Babies).

-Because there are many menus when running the miniNet and the choice range

between different menus is different. We just use one method and transfer into maximum menu number and minimal menu number to judge every menu.

4. The documented perform process and certain scenarios:

1. Display the main menu:

```
*****
***      MininNet Menu      ***
***-----***
**      1 List everyone information      **
**      2 Select user name              **
**      3 Add new user                  **
**      4 Are these two direct friend    **
**      5 Are these two couple           **
**      6 Exit social network system     **
*****
Enter an option_
```

2. Normal input:

2.1 Input menu number:

```
*****
***      MininNet Menu      ***
***-----***
**      1 List everyone information      **
**      2 Select user name              **
**      3 Add new user                  **
**      4 Are these two direct friend    **
**      5 Are these two couple           **
**      6 Exit social network system     **
*****
Enter an option_ dsa
--- PLEASE ENTER CORRECT INTEGER NUMBER ---
Enter an option again_ -1
--- PLEASE ENTER CORRECT INTEGER NUMBER ---
Enter an option again_ 0
--- PLEASE ENTER NUMBER BETWEEN THE MENU ---
Enter an option again_ 7
--- PLEASE ENTER NUMBER BETWEEN THE MENU ---
Enter an option again_ 1.2222
--- PLEASE ENTER CORRECT INTEGER NUMBER ---
Enter an option again_ 1
```

3. Functionality:

3.1 List everyone information and friend relationship:

 *** Persons inforamtion list in miniNet ***

Name	Status	Sex	Age	Mom Name	Dad Name	Couple Name	MaritalStatus
Mary	Working at KFC	Female	35	No data	No data	Lee	Married
Lee	Working at Rmit	Male	55	No data	No data	Mary	Married
Joe	Finding the job	Male	40	Mary	Lee	Joez	Married
Joez	At home	Female	45	Liu	Shen	Joe	Married
Nan	Looking for job	Male	25	Mary	Lee	No data	Single
Zoe	At park	Female	45	Mary	Lee	No data	Single
Maison	Working at Rmit	Male	45	No data	No data	Kitty	Married
Kitty	Working at Rmit	Female	43	No data	No data	Maison	Married
Lisa	Looking for job	Male	35	No data	No data	No data	Single
Jacob	Working at Rmit	Female	46	Mary	Lee	Viva	Married
Viva	Looking for job	Male	55	Liu	Shen	Jacob	Married
HeiQiuDan	At home	Female	43	No data	No data	Fiona	Married
Viva	Looking for job	Male	55	Liu	Shen	Jacob	Married
HeiQiuDan	At home	Female	43	No data	No data	Fiona	Married
Fiona	Working at Rmit	Female	43	No data	No data	HeiQiuDan	Married
Kenny	Studying at Rmit	Female	15	Joe	Joez	No data	No data
Ken	Finding parttim job	Male	13	Joe	Joez	No data	No data
Jing	Studying at Rmit	Female	12	Joe	Joez	No data	No data
Hawa	Studying at school	Female	8	Maison	Kitty	No data	No data
John	Studying at school	Male	13	Maison	Kitty	No data	No data
Xiao	At home	Male	1	Joe	Joez	No data	No data
Feng	At home	Female	2	Maison	Kitty	No data	No data
Liang	At home	Male	1	Maison	Kitty	No data	No data
Liu	Working at KFC	Female	35	No data	No data	Shen	Married
Shen	Working at Rmit	Male	55	No data	No data	Liu	Married

| Shen | working at Kmit | male | 33 | NO data | NO data | Liu | married |

*** Friendship connection information list ***

Mary is NO Friend

Lee is NO Friend

User Name: Joe | Friend Name: Jacob Kitty Nan

Joez is NO Friend

User Name: Nan | Friend Name: Joe Kitty

Zoe is NO Friend

Maison is NO Friend

User Name: Kitty | Friend Name: Joe Nan

Lisa is NO Friend

User Name: Jacob | Friend Name: Joe

Viva is NO Friend

HeiQiuDan is NO Friend

Viva is NO Friend

HeiQiuDan is NO Friend

Fiona is NO Friend

User Name: Kenny | Friend Name: Hawa John

Ken is NO Friend

Jing is NO Friend

User Name: Hawa | Friend Name: Kenny

User Name: John | Friend Name: Kenny

Liu is NO Friend

Shen is NO Friend

*** MininNet Menu ***

** 1 List everyone information **

3.2 select user name:

```

*****
***      MininNet Menu      ***
***-----***
**      1 List everyone information      **
**      2 Select user name              **
**      3 Add new user                  **
**      4 Are these two direct friend    **
**      5 Are these two couple           **
**      6 Exit social network system     **
*****

Enter an option_ 2
Enter your selected name_Joe
----- Joe information List -----
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
-----
| Joe      | Finding the job | Male | 40 | Mary    | Lee     | Joez      | Married   |
-----

*****
**      Query & modify Menu      **
*****
**      1 Print parent information    **
**      2 Print children information* **
**      3 Print friends information   **
**      4 Update the information      **
**      5 Delete the user:           **
**      6 Back to main menu          **
*****

Enter an option_

```

Display selected information

3.2.1 Print parent information:

```

**      1 Print parent information    **
**      2 Print children information* **
**      3 Print friends information   **
**      4 Update the information      **
**      5 Delete the user:           **
**      6 Back to main menu          **
*****

Enter an option_ 1
*****
**      Parent Information List      **
*****
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
-----
| Mary     | Working at KFC | Female | 35 | No data | No data | Lee        | Married   |
-----
| Lee      | Working at Rmit | Male | 55 | No data | No data | Mary       | Married   |
-----

```

Display user parent information

3.2.2 Print children information:

```

*****
**  Query & modify Menu  **
*****
** 1 Print parent information **
** 2 Print children information*
** 3 Print friends information **
** 4 Update the information **
** 5 Delete the user:      **
** 6 Back to main menu    **
*****
Enter an option_ 2
*****
**Children Information List**
*****
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Kenny   | Studying at Rmit | Female| 15 | Joe   | Joez   | No data | No data |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Ken     | Finding parttim job | Male| 13 | Joe   | Joez   | No data | No data |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Jing    | Studying at Rmit | Female| 12 | Joe   | Joez   | No data | No data |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Xiao    | At home          | Male| 1  | Joe   | Joez   | No data | No data |
|-----|-----|-----|-----|-----|-----|-----|-----|

```

Display children information

3.2.3 Print friends information:

```

** 4 Update the information **
** 5 Delete the user:      **
** 6 Back to main menu    **
*****
Enter an option_ 3
*****
*** Friendship connection information list ***
*****
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Jacob    | Working at Rmit | Female| 46 | Mary   | Lee    | Viva    | Married |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Kitty    | Working at Rmit | Female| 43 | No data | No data | Maison  | Married |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Nan      | Looking for job | Male| 25 | Mary   | Lee    | No data | Single  |
|-----|-----|-----|-----|-----|-----|-----|-----|

```

Display friend information

3.2.4 Update user information:

```

** 3 Print friends information **
** 4 Update the information **
** 5 Delete the user: **
** 6 Back to main menu **

```

Enter an option_ 4

1 User Status:

2 User Age:

3 Back to main menu:

Enter the number:

1

Enter new status:

fsad

--- UPDATE SUCCESSFULLY ---

--- DO YOU CONTINUE TO UPDATE(Yes or No) ---

Please input_

yes

1 User Status:

2 User Age:

3 Back to main menu:

Enter the number:

2

Enter new age:

55

UPDATE SUCCESSFULLY

DO YOU CONTINUE TO UPDATE(Yes or No)

no

,

Display again:

Enter an option_ 2

Enter your selected name_ Joe

----- Joe information List -----

Name	Status	Sex	Age	Mom Name	Dad Name	Couple Name	MaritalStatus
Joe	fsad	Male	55	Mary	Lee	Joez	Married


3.2.5 Delete user name:

Jacob, Kitty and Nan is joe's friend and I delete Kitty and then shows Joe's friend again:


```

*      5 Are these two couple      **
*      6 Exit social network system  **
*****
:enter an option_ 2
:enter your selected name_Kitty
----- Kitty information List -----
Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
-----|-----|-----|-----|-----|-----|-----|-----|
Kitty     | Working at Rmit | Female| 43 | No data | No data | Maison    | Married   |
-----|-----|-----|-----|-----|-----|-----|-----|
*****
*      Query & modify Menu      **
*****
* 1 Print parent information  **
* 2 Print children information*
* 3 Print friends information **
* 4 Update the information    **
* 5 Delete the user:         **
* 6 Back to main menu        **
*****
:enter an option_ 5
-- DELETE SUCCESSFULLY ---

```




Delete Kitty

```

** 4 Update the information **
** 5 Delete the user:      **
** 6 Back to main menu    **
*****
Enter an option_ 3
*****
*** Friendship connection information list ***
*****
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
-----|-----|-----|-----|-----|-----|-----|-----|
| Jacob    | Working at Rmit | Female| 46 | Mary    | Lee     | Viva     | Married   |
-----|-----|-----|-----|-----|-----|-----|-----|
| Nan      | Looking for job | Male | 25 | Mary    | Lee     | No data  | Single    |
-----|-----|-----|-----|-----|-----|-----|-----|

```



Display Joe friends again

NO Kitty in there

3.3 Add new user:

3.3.1 Add new baby:

Are these two couple
 ** 6 Exit social network system **

Enter an option_ 3
 Enter new user name_ Joe
 --- There is a same name in miniNet so cannot enter ---
 Please enter name again_ aaa
 Enter new user status: InRmit
 Choose new user sex
 1) Male, 2) Female_ 2
 Enter new user age_ -1
 PLEASE ENTER CORRECT INTEGER NUMBER_ 200
 --- AGE IS VERY LARGE, IS BETWEEN 1-150 ---
 PLEASE ENTER VALID NUMBER AGAIN_ 1
 Because this user age is under 16, Must be add parent name
 Enter your mom or father name_ dsads
 dsads IS NOT IN MININET PLEASE ENTER AGAIN
 Enter your mom or father name_ Nan
 --- This adult has been single ---
 Enter your mom or father name_ Joe
 |--- New baby add successfully ---
 -Show Joe and Joe's wife children list:

Enter an option_ 2
 Enter your selected name_ Joe
 ----- Joe information List -----

Name	Status	Sex	Age	Mom Name	Dad Name	Couple Name	MaritalStatus
Joe	Finding the job	Male	40	Mary	Lee	Joez	Married

 * Query & modify Menu **

 * 1 Print parent information **
 * 2 Print children information*
 * 3 Print friends information **
 * 4 Update the information **
 * 5 Delete the user: **
 * 6 Back to main menu **

Enter an option_ 2

 *Children Information List**

Name	Status	Sex	Age	Mom Name	Dad Name	Couple Name	MaritalStatus
Kenny	Studying at Rmit	Female	15	Joe	Joez	No data	No data
Ken	Finding parttim job	Male	13	Joe	Joez	No data	No data

Ken	Finding parttim job	Male 15	Joe	Joez	No data	No data	
Jing	Studying at Rmit	Female 12	Joe	Joez	No data	No data	
Xiao	At home	Male 1	Joe	Joez	No data	No data	
aaa	dsads	Female 1	Joez	Joe	No data	No data	

Enter an option_ 2

Enter your selected name_ Joez

----- Joez information List -----

Name	Status	Sex	Age	Mom Name	Dad Name	Couple Name	MaritalStatus
Joez	At home	Female 45	Liu	Shen	Joe	Married	

** Query & modify Menu **

** 1 Print parent information **

** 2 Print children information*

** 3 Print friends information **

** 4 Update the information **

** 5 Delete the user: **

** 6 Back to main menu **

Enter an option_ 2

Children Information List

Name	Status	Sex	Age	Mom Name	Dad Name	Couple Name	MaritalStatus
Kenny	Studying at Rmit	Female 15	Joe	Joez	No data	No data	
Ken	Finding parttim job	Male 13	Joe	Joez	No data	No data	

Jing	Studying at Rmit	Female 12	Joe	Joez	No data	No data	
Xiao	At home	Male 1	Joe	Joez	No data	No data	
aaa	dsads	Female 1	Joez	Joe	No data	No data	

3.3.2 Add teenager user:

Enter an option_ 3
Enter new user name_bbb
Enter new user status:AtHome
Choose new user sex
1) Male, 2) Female_ 1
Enter new user age_ 15
Because this user age is under 16, Must be add parent name

Enter your mom or father name_ Maison

--- New teenager add successfully ---

--- Do you want to add friend ---

Please enter('Yes' or 'No')_yes

Enter friend name_aaa

--- aaa is not teenager so cannot become friend ---

--- Continue to add friend ---

Please enter ('Yes' or 'No')_Lee

--- ONLY ENTER 'YES' OR 'NO' ---

ENTER AGAIN-yes

--- Do you want to add friend ---

Please enter('Yes' or 'No')_yes

Enter friend name_Lee

--- Lee is not teenager so cannot become friend ---

--- Continue to add friend ---

Please enter ('Yes' or 'No')_yes

--- Do you want to add friend ---

Please enter('Yes' or 'No')_yes

Enter friend name_Hawa

--- They are family relationship so cannot become friend ---

--- Continue to add friend ---

Please enter ('Yes' or 'No')_yes

--- Do you want to add friend ---

Please enter('Yes' or 'No')_yes

Enter friend name_John

--- They are family relationship so cannot become friend ---

--- Continue to add friend ---

Please enter ('Yes' or 'No')_yes

--- Do you want to add friend ---

Please enter('Yes' or 'No')_yes

Enter friend name_Ken

--- Friendship connection establish successfully ---

--- Continue to add friend ---

Please enter ('Yes' or 'No')_no

Baby

Adult

Same parents

Show Ken friends information:

```

Enter an option_ 2
Enter your selected name_Ken
----- Ken information List -----
|Name      |Status      |Sex |Age |Mom Name  |Dad Name  |Couple Name |MaritalStatus |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Ken      | Finding parttim job | Male | 13 | Joe      | Joez      | No data    | No data    |
|-----|-----|-----|-----|-----|-----|-----|-----|

*****
**  Query & modify Menu  **
*****
** 1 Print parent information **
** 2 Print children information*
** 3 Print friends information **
** 4 Update the information **
** 5 Delete the user:      **
** 6 Back to main menu    **
*****

Enter an option_ 3
*****
***  Friendship connection information list  ***
*****
|Name      |Status      |Sex |Age |Mom Name  |Dad Name  |Couple Name |MaritalStatus |
|-----|-----|-----|-----|-----|-----|-----|-----|
| bbb      | AtHome      | Male | 15 | Kitty     | Maison    | No data    | No data    |
|-----|-----|-----|-----|-----|-----|-----|-----|

```

3.3.3 Add adult user:

3.3.3.1 Add adult who is single and no parent and no friend:

```

Enter an option_ 3
Enter new user name_ccc
Enter new user status:Working
Choose new user sex
1) Male, 2) Female_ 1
Enter new user age_ 45
--- Because this user is adult, do you enter the parent information ---
Please enter ('Yes' or 'No')_no
--- You are not add Parent ---
--- Do you enter this couple information for this adult ---
Please enter ('Yes' or 'No')_ no
--- You do not add couple for this adult ---
--- Add adult successfully ---
--- Do you want to add friend ---
Please enter('Yes' or 'No')_no
--- You are not add friend ---
*****

Enter an option_ 2
Enter your selected name_ccc
----- ccc information List -----
|Name      |Status      |Sex |Age |Mom Name  |Dad Name  |Couple Name |MaritalStatus |
|-----|-----|-----|-----|-----|-----|-----|-----|
| ccc      | Working      | Male | 45 | No data    | No data    | No data    | Single    |
|-----|-----|-----|-----|-----|-----|-----|-----|

*****

```

3.3.3.2 Add adult who is married and have parent and have friend:

Enter an option_ 3
Enter new user name_ddd
Enter new user status:InOffice
Choose new user sex
1) Male, 2) Female_ 1
Enter new user age_ 45
--- Because this user is adult, do you enter the parent information --- **Young adults**
Please enter ('Yes' or 'No')_yes
Enter parent name_ Joe
--- This young adult has been teenagers or babies children so cannot as adult parent ---
--- Because this user is adult, do you enter the parent information ---
Please enter ('Yes' or 'No')_yes
Enter parent name_ Lee
--- Add parent information successfully ---
--- Do you enter this couple information for this adult --- **Adult who has been married so cannot be married again**
Please enter ('Yes' or 'No')_ yes
Enter couple name_ Joe
--- Joe has been married ---
--- Do you enter this couple information for this adult ---
Please enter ('Yes' or 'No')_ yes
Enter couple name_ Nan
--- Add adult successfully ---
--- Do you want to add friend --- **Couple cannot be friend**
Please enter('Yes' or 'No')_yes
Enter friend name_ Nan
--- They have been couple so cannot become friend (Wife or Husband) ---
--- Continue to add friend ---
Please enter ('Yes' or 'No')_yes
Enter friend name_ Ken

Enter friend name_ Ken
--- Cannot find the this adult information ---
--- Continue to add friend ---
Please enter ('Yes' or 'No')_ yes
Enter friend name_ Zoe
--- They have been family so cannot become friend (Brother or Sister) --- **Brother or sister cannot be friend**
--- Continue to add friend ---
Please enter ('Yes' or 'No')_yes
Enter friend name_ Kitty
--- Friendship connection establish successfully ---
--- Continue to add friend ---
Please enter ('Yes' or 'No')_no

Show this new adult and relational parent and couple friend information:

```

Enter an option_ 2
Enter your selected name_ddd
----- ddd information List -----
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
-----
| ddd      | InOffice    | Male | 45 | Mary    | Lee     | Nan        | Married      |
-----

*****
** Query & modify Menu **
*****
** 1 Print parent information **
** 2 Print children information*
** 3 Print friends information **
** 4 Update the information **
** 5 Delete the user: **
** 6 Back to main menu **
*****

Enter an option_ 1
*****
** Parent Information List **
*****
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
-----
| Mary     | Working at KFC | Female | 35 | No data | No data | Lee        | Married      |
-----
| Lee      | Working at Rmit | Male | 55 | No data | No data | Mary       | Married      |
-----

*****
** Query & modify Menu **
*****
** 1 Print parent information **
** 2 Print children information*
** 3 Print friends information **
** 4 Update the information **
** 5 Delete the user: **
** 6 Back to main menu **
*****

Enter an option_ 3
*****
*** Friendship connection information list ***
*****
|Name      |Status      |Sex |Age |Mom Name |Dad Name |Couple Name |MaritalStatus |
-----
| Kitty    | Working at Rmit | Female | 43 | No data | No data | Maison     | Married      |
-----

```

3.4 Are these two direct friend

```

Enter an option_ 4
--- Enter first user Name ---
dsa
dsa IS NOT IN MININET PLEASE ENTER AGAIN
--- Enter first user Name ---
Joe
--- Enter second user Name ---
Zoe
--- They have not been friend ---
--- Do you want to establish friendship between them ---
Please input ('Yes' or 'No')_ yes
-- They cannot become friend because they have the same parent --

```

Two persons have two parent cannot be friend

```

Enter an option_ 4
--- Enter first user Name ---
Joe
--- Enter second user Name ---
Ken
--- They are not friends and they cannot become friends ---
--- Continue to enter name ? Enter 'Yes' or 'No' ---
Please enter_
yes
--- Enter first user Name ---
Jacob
Jacob IS NOT IN MININET PLEASE ENTER AGAIN
--- Enter first user Name ---
Jacob
--- Enter second user Name ---
Kitty
--- They have not been friend ---
--- Do you want to establish friendship between them ---
Please input ('Yes' or 'No')_ yes
--- ADD SUCCESSFULLY ---

```

Adult

Teenager

Establish friendship

```

Enter an option_ 4
--- Enter first user Name ---
Jing
--- Enter second user Name ---
Hawa
--- They have not been friend ---
--- Do you want to establish friendship between them ---
Please input ('Yes' or 'No')_ yes
--- ADD SUCCESSFULLY ---

```

Two teenagers establish friendship

```

Enter an option_ 4
--- Enter first user Name ---
Jacob
--- Enter second user Name ---
Joe
--- They have been friend ---
--- Do you want to remove friendship connection? ---
Please input ('Yes' or 'No')_ yes
--- DELETE SUCCESSFULLY ---

```

Two persons have been friend can delete friendship connection

3.5 Are these two married

```

Enter an option_ 5
--- Enter first user Name ---
dad
dad IS NOT IN MININET PLEASE ENTER AGAIN
--- Enter first user Name ---
Joe
--- Enter second user Name ---
Kenny
--- They are not couple because these two person is not adult at the same time ---
--- Continue to enter name ---
Please enter ('Yes' or 'No')_ yes
--- Enter first user Name ---
Joe
--- Enter second user Name ---
Nan
--- They have not been couple and they are also single ---
--- Because the same sex, so they cannot become couple ---
--- Continue to enter name ---
Please enter ('Yes' or 'No')_ yes
--- Enter first user Name ---
Joe
--- Enter second user Name ---
Joez
--- They have been couple ---


```

Has married

Same Sex

These two is couple


```
Please enter ('Yes' or 'No')_yes
--- Enter first user Name ---
Nan
--- Enter second user Name ---
Zoe
--- They have not been couple and they are also single ---
--- Do you restablish marital relations to them ---
Please enter ('Yes' or 'No')_yes
CONGRATULATION, ESTABLISH SUCCESSFULLY
```



Two single can be married

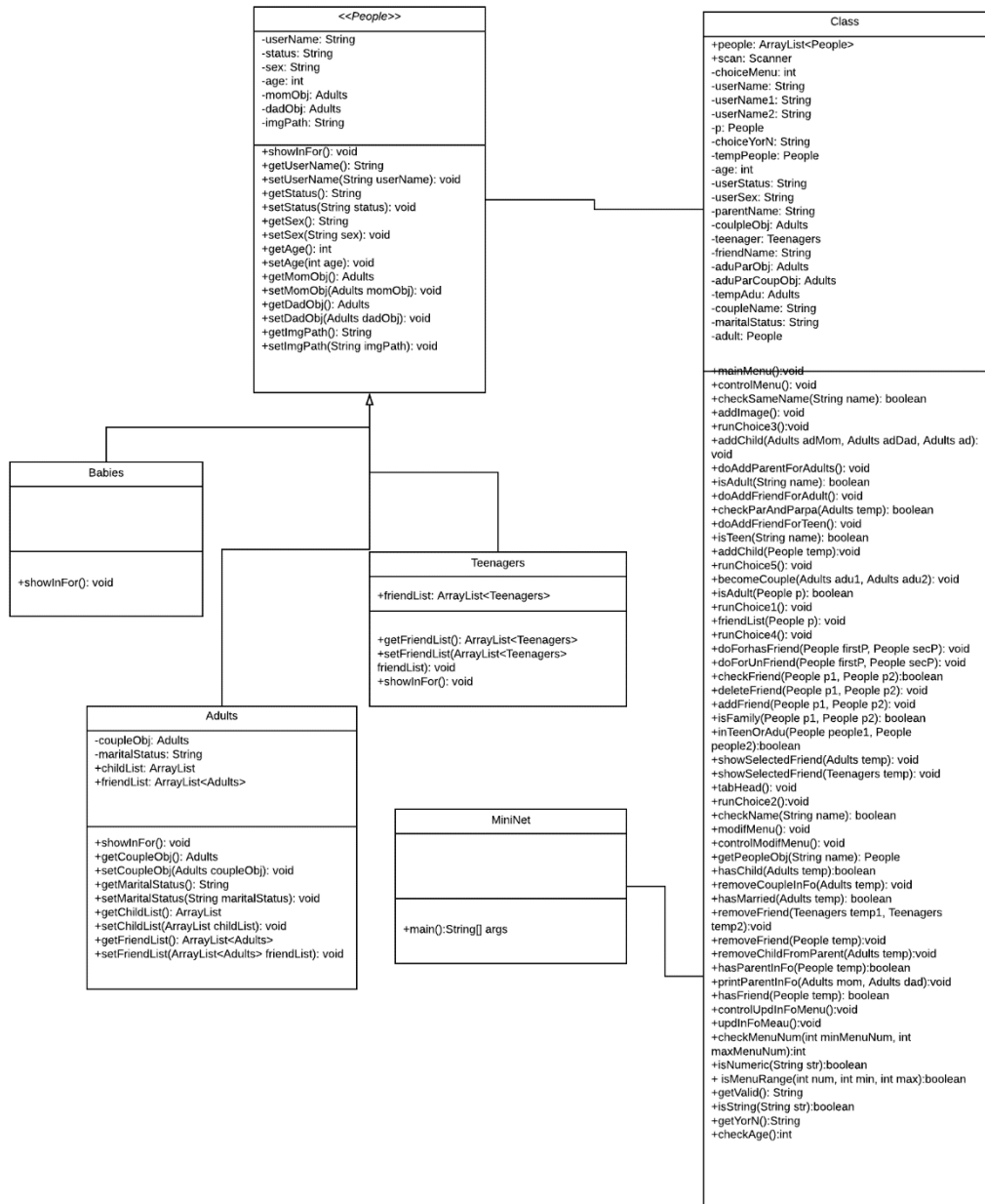
3.6 Addition: photo path added

```
Enter an option_ 3
Enter new user name_aaa
--- Do you want to upload photo ---
Please enter ('Yes' or 'No')_yes
--- Your photo needs to be kept in photo file ---
Please enter your photo path_ fkljfkjl
--- Cannot find the image ---
Do you need to add again_yes
--- Your photo needs to be kept in photo file ---
Please enter your photo path_ c:/photo/aaa.jpg
--- Your photo is added successfully ---
```



Wrong photo path

Class Diagram:



(This image is too small and not clear so we put an another clear one in the file)