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Report to explain the code of task2(oop)

Code Details

code structure:

1-class robot:

Its attributes:

- Name:describe the name of robot.
- Array of function id's:decribe the missions which robot can do.

{cleaner robot = 1,driver robot=2,assignment robot=3,cook robot= 4,hairstlisy robot=5}.

- Price per day:decribes the price to rent the robot for one day.
- Rented :if the robot is rented,it becomes true.
- Array of dates rented (in the format: day/month/year):it stores all the dates that the robots is rented on.

Its functions:

- add robot:It adds a new robot to the admin company you should pass the new robot's name , functions which robot can do,price per day for rent.
- display robot:It displays the robot information(name,functions id,price per day,and days the robot is rented)
- get name:It returns the name of robot to help search for robot by name.
- get date:It returns the dates when the robot is rented.it helps the admin to make sure that the robot is available to rent.

- add date:If the admin rents the robot on a day,It add that date to make sure no one can rent that robot on that date.
- changeboolean: if the admin rents any robot,it change "rented" to true.

2-class User

Its attributes:

- Name:describe the name of user
- Telephone number:describes the phone number of user
- Price per day:decribes the price to rent the robot for one day
- Emai :the email of user to contact him.
- Array of robots rented :it stores all the No.of robot that the user rented or will rent.

Its functions:

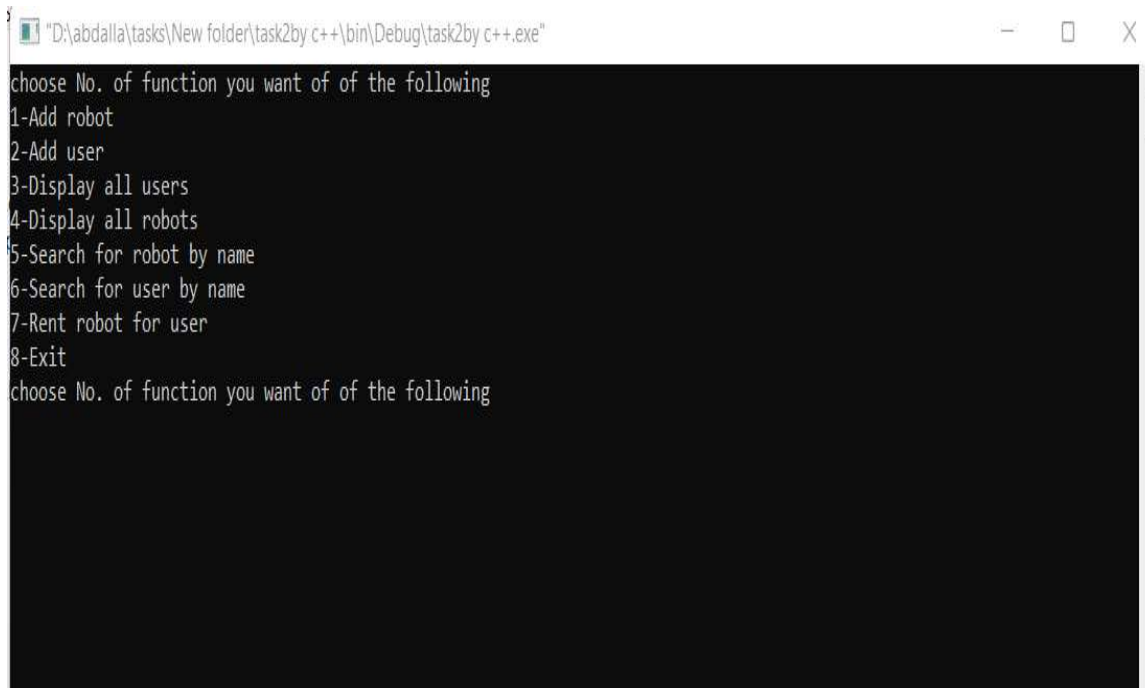
- adduser:It adds a new user to the admin company you should pass the new user's name , telephone number, email.
- displayuser:It displays the user information(name,functions id,price per day,and days the robot is rented)
- getname:It returns the name of user to help search for user by name.
- addrobotrent:If the admin rents the robot for the user,It add No. of robot to the list.

3-main functions:

- [menulist](#):It prints all the options that the admin can do to choose from it
- [fun_id_print](#):It prints all the posiible function for robots to ask the admin to Enter the new robot functions id's

How the program work

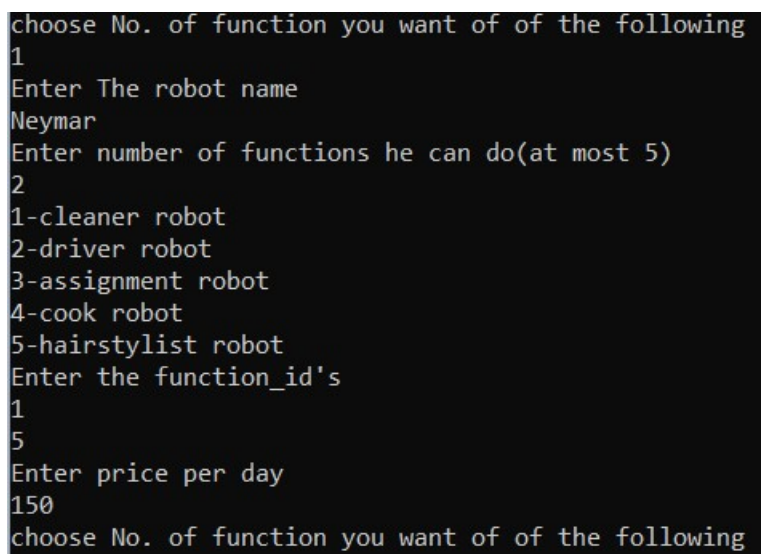
- at first, it print all available functions that the program can do.



```
"D:\abdalla\tasks\New folder\task2by c++\bin\Debug\task2by c++.exe"
choose No. of function you want of of the following
1-Add robot
2-Add user
3-Display all users
4-Display all robots
5-Search for robot by name
6-Search for user by name
7-Rent robot for user
8-Exit
choose No. of function you want of of the following
```

- The admin should enter a number from 1-8;

case1:



```
choose No. of function you want of of the following
1
Enter The robot name
Neymar
Enter number of functions he can do(at most 5)
2
1-cleaner robot
2-driver robot
3-assignment robot
4-cook robot
5-hairstylist robot
Enter the function_id's
1
5
Enter price per day
150
choose No. of function you want of of the following
```

- The admin enter the new robot name and functions and the program stores them and add a new robot with that qualifications
- After:It asks the admin if he want to do other function

case 2:

```
choose No. of function you want of of the following
2
Enter The user name
Abdalla
Enter telephone number
732153
Enter the email
Abdalla@gmail.com
choose No. of function you want of of the following
```

- The admin enter the new user name,email and telephone number and the program stores them and add a new user.

case 3:

```
choose No. of function you want of of the following
3
User name:Ahmed
User telephone number:1121415216
User email:Ahmed@gmail.com
Robots rented:

User name:Hady
User telephone number:1212451261
User email:Hady@gmail.com
Robots rented:

User name:Ali
User telephone number:1021415631
User email:Ali@gmail.com
Robots rented:

User name:Abdalla
User telephone number:732153
User email:Abdalla@gmail.com
Robots rented:

choose No. of function you want of of the following
```

- It displays all the users exist(you start with 3 users and the admin can add new users)

case 4:

```
4
Name of robot:Messi
Robot functions
1,2,5,
Price per day:250
Dates when robots is rented:

Name of robot:Ronaldo
Robot functions
1,2,4,
Price per day:150
Dates when robots is rented:

Name of robot:Salah
Robot functions
1,2,5,
Price per day:200
Dates when robots is rented:

Name of robot:Neymar
Robot functions
1,5,5,
Price per day:150
Dates when robots is rented:

choose No. of function you want of of the following
```

- It display all robots exist

case 5:

```

choose No. of function you want of of the following
5
Enter the name of robot
Neymar
Name of robot:Neymar
Robot functions
1,5,5,
Price per day:150
Dates when robots is rented:

choose No. of function you want of of the following
5
Enter the name of robot
Lewandoski
Not found
choose No. of function you want of of the following

```

- It searches for robots by name.
- if exist:it displays the robot information
- if not exist:prints not found

case 6:

```

choose No. of function you want of of the following
6
Enter the name of user
Ahmed
User name:Ahmed
User telephone number:1121415216
User email:Ahmed@gmail.com
Robots rented:

choose No. of function you want of of the following
6
Enter the name of user
Mohamed
Not found
choose No. of function you want of of the following

```

- It searches for users by name.
- if exist:it displays the user information
- if not exist:prints not found

case 7:

- At first:It shows all users and ask admin to choose the user(by No. of him)

```
7
Choose which user you want to rent to from the following list(choose number of him)
1-User name:Ahmed
User telephone number:1121415216
User email:Ahmed@gmail.com
Robots rented:

2-User name:Hady
User telephone number:1212451261
User email:Hady@gmail.com
Robots rented:

3-User name:Ali
User telephone number:1021415631
User email:Ali@gmail.com
Robots rented:

4-User name:Abdalla
User telephone number:732153
User email:Abdalla@gmail.com
Robots rented:

3
Enter the data you want to rent robot on in the format day/month/year
3/3/2003
Messi robot is available on that day
Ronaldo robot is available on that day
Salah robot is available on that day
Neymar robot is available on that day
choose which robot to rent
4
rent successfully
choose No. of function you want of of the following
```

- It asks the admin to enter the date in the form day/month/year.
- It prints all available robots on that day and ask the admin to choose one
- If the admin enters the No. of unavailable robot ,it prints "Unavailable" and asks him to enter it again .


```

choose No. of function you want of of the following
7
Choose which user you want to rent to from the following list(choose number
of him)
1-User name:Ahmed
User telephone number:1121415216
User email:Ahmed@gmail.com
Robots rented:

2-User name:Hady
User telephone number:1212451261
User email:Hady@gmail.com
Robots rented:

3-User name:Ali
User telephone number:1021415631
User email:Ali@gmail.com
Robots rented:
4,

4-User name:Abdalla
User telephone number:732153
User email:Abdalla@gmail.com
Robots rented:

4
Enter the data you want to rent robot on in the format day/month/year
3/3/2003
Messi robot is available on that day
Ronaldo robot is available on that day
Salah robot is available on that day
choose which robot to rent
4
unavailable robot,choose another one3
rent successfully
choose No. of function you want of of the following

```

- At end,it print "rent successfully" and add the date of rent to the robot which user rent, and add No. of robot rent to the user information.

```
User name:Ali
User telephone number:1021415631
User email:Ali@gmail.com
Robots rented:
4,1,

User name:Abdalla
User telephone number:732153
User email:Abdalla@gmail.com
Robots rented:
3,

choose No. of function you want of of the following
4
Name of robot:Messi
Robot functions
1,2,5,
Price per day:250
Dates when robots is rented:
2/5/2005

Name of robot:Ronaldo
Robot functions
1,2,4,
Price per day:150
Dates when robots is rented:

Name of robot:Salah
Robot functions
1,2,5,
Price per day:200
Dates when robots is rented:
3/3/2003
1/1/2004

Name of robot:Neymar
Robot functions
1,5,5,
Price per day:150
Dates when robots is rented:
3/3/2003
```

case 8:

- End the program.

