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CSC341

Homework 1

In homework assignment 1 I started off trying to figure out how to save my stuff into a text document like you did. However, after trying for 6 hours and feeling like I got nowhere I decided to use the scanner and console log method. After deciding to use this method the only other problem I ran into was the saving method because I was trying to put the Queue in as a parameters. Even though I felt the logic was correct I just could not get it to work. After changing that though and using getters and setters I got the program to work.

CUSTOMER:

```java
package homework1;

import java.util.*;

public class Customer implements TheCustomer
{
        String name, problem;
        public Customer(String name, String problem) {
                this.name = name;
                this.problem = problem;
        }
        public Customer() {
                name = "";
                problem = "";
        }
        public String getName() {
                return name;
        }
        public void setName(String name) {
                this.name = name;
        }
        public String getProblem() {
                return problem;
        }
        public void setProblem(String problem) {
                this.problem = problem;
        }
}
```

INTERFACES:

```java
package homework1;

import java.util.*;

interface TheCustomer
{
        public String getName();
        public String getProblem();
        public void setName(String name);
        public void setProblem(String problem);
}

interface Staffer
{
        //will just a remove from select q method
        public void print(String reason, String name);
}

interface Controller
{
        //Controls the App
        void appInit();
        void run();
}
```

MAIN:

```java
package homework1;

public class Main {

    public static void main(String[] args)
    {
        Controller app = new ServiceOps();
        app.run();
    }

}
```

STAFFWORKER:

```java
package homework1;

import java.util.*;

public class StaffWorker implements Staffer
{

    public void print(String reason, String name)
    {
        System.out.println("Thank you " + name  + " for joining us this today.
We will be with you soon to help with your " + reason);
    }

}
```

SERVICE:

```java
package homework1;

import java.util.*;

class ServiceOps implements Controller
{

    Customer user;
    StaffWorker staff;

    private Queue<Customer> Qa = new LinkedList<Customer>(); //Initialize the Q
    private Queue<Customer> Qb = new LinkedList<Customer>();
```

```java
        public void appInit()
        {
                user = new Customer();
                staff = new StaffWorker();
        }

        @Override
        public void run()
        {
                do
                {
                        Scanner first = new Scanner(System.in); //declare use of Scanner
                        System.out.println("Are you a Customer (Y or N): "); //question
for user
                        String areTheyCustomer; //creating string
                        areTheyCustomer = first.nextLine(); //setting areTheyCustomer =
user input
                        areTheyCustomer.toLowerCase(); //making lower case
                        //System.out.println(areTheyCustomer); //for testing

                        if (areTheyCustomer.contains("y")) //if contains the letter enter
                        {
                                Scanner second = new Scanner (System.in);
                                System.out.println("Enter First Name and Last intial
please: "); //? for user
                                String userName;
                                userName = second.nextLine();
                                //System.out.println(userName); for testing
                                Scanner third = new Scanner(System.in);
                                System.out.println("Hello " + userName + " do you already
have an appointment (Y or N): ");
                                String appointment;
                                appointment = third.nextLine();
                                appointment = appointment.toLowerCase();

                                if (appointment.contains("y"))
                                {
                                        // add to appointment Qa

                                        System.out.println("What is your reason for being
here?");

                                        Scanner fourth = new Scanner (System.in);
                                        System.out.println("TV Service (A), Internet Service
(B), Cell Phone Service (C),"
                                                        + "Steam Service (D), Other (E)");
                                        String reason;
                                        reason = fourth.nextLine();
                                        reason = reason.toLowerCase();
                                        String reasonAnswer = null;
                                        if (reason.contains("a"))
                                        {
                                                //add reason as tv
                                                reasonAnswer = "TV Service";
                                        }
                                        if (reason.contains("b"))
```

```java
                                    {
                                        //add reason as Internet
                                        reasonAnswer = "Internet Service";
                                    }
                                    if (reason.contains("c"))
                                    {
                                        //add reason as cell phone
                                        reasonAnswer = "Cell Phone Service";
                                    }
                                    if (reason.contains("d"))
                                    {
                                        //add reason as steam
                                        reasonAnswer = "Steam Service";
                                    }
                                    if (reason.contains("e"))
                                    {
                                        //add reason as other
                                        reasonAnswer = "Other";
                                    }

                                    System.out.println("Happy to meet you " + userName +
        " we will be with you "
                                              + "as quickly as possible to help with
        your " + reasonAnswer);
                                    String result = userName+","+reasonAnswer;
                                    //System.out.println(result);
                                    Customer  cus = new Customer(userName,
        reasonAnswer);

                                    Qa.add(cus);
                            }
                            else
                            {
                                    // add to non appointment Qb

                                    System.out.println("What is your reason for being
        here?");

                                    Scanner fourth = new Scanner(System.in);
                                    System.out.println("TV Service (A), Internet Service
        (B), Cell Phone Service (C),"
                                              + "Steam Service (D), Other (E)");
                                    String reason;
                                    reason = fourth.nextLine();
                                    reason = reason.toLowerCase();
                                    String reasonAnswer = null;
                                    if (reason.contains("a"))
                                    {
                                        //add reason as tv
                                        reasonAnswer = "TV Service";
                                    }
                                    if (reason.contains("b"))
                                    {
                                        //add reason as Internet
                                        reasonAnswer = "Internet Service";
                                    }
                                    if (reason.contains("c"))
```

```java
                    {
                        //add reason as cell phone
                        reasonAnswer = "Cell Phone Service";
                    }
                    if (reason.contains("d"))
                    {
                        //add reason as steam
                        reasonAnswer = "Steam Service";
                    }
                    if (reason.contains("e"))
                    {
                        //add reason as other
                        reasonAnswer = "Other";
                    }

                    System.out.println("Happy to meet you " + userName +
" we will be with you "
                                    + "as quickly as possible to help with
your " + reasonAnswer);

                    String result = "Name: "+userName+" Reason:
"+reasonAnswer;
                    //System.out.println(result);
                    Customer  cus = new Customer(userName,
reasonAnswer);
                    Qa.add(cus);
                    staff.print(userName,reasonAnswer);
                }
            }
            else
            {
                //output name from q because you are a staffer
                if (Qa.size() > 0)
                {
                    System.out.println(Qa.peek().name + " " +
Qa.peek().problem);
                }
                else if(Qb.size() > 0)
                {
                    Qb.remove();
                }
                else {
                    System.out.println("No Customers waiting");
                }
            }

        }while (Qa.size() < 5);
    }
}
```

OUTLINE:

Are you a Customer (Y or N):
y
Enter First Name and Last intial please:
drew
Hello drew do you already have an appointment (Y or N):
y
What is your reason for being here?
TV Service (A), Internet Service (B), Cell Phone Service (C),Steam Service (D), Other
(E)
a
Happy to meet you drew we will be with you as quickly as possible to help with your
TV Service
Are you a Customer (Y or N):
n
drew TV Service
Are you a Customer (Y or N):
y
Enter First Name and Last intial please:
hayden
Hello hayden do you already have an appointment (Y or N):
y
What is your reason for being here?
TV Service (A), Internet Service (B), Cell Phone Service (C),Steam Service (D), Other
(E)
b
Happy to meet you hayden we will be with you as quickly as possible to help with your
Internet Service
Are you a Customer (Y or N):
y
Enter First Name and Last intial please:
noah
Hello noah do you already have an appointment (Y or N):
y
What is your reason for being here?
TV Service (A), Internet Service (B), Cell Phone Service (C),Steam Service (D), Other
(E)
c
Happy to meet you noah we will be with you as quickly as possible to help with your
Cell Phone Service
Are you a Customer (Y or N):
y
Enter First Name and Last intial please:
jj
Hello jj do you already have an appointment (Y or N):
y
What is your reason for being here?
TV Service (A), Internet Service (B), Cell Phone Service (C),Steam Service (D), Other
(E)
d
Happy to meet you jj we will be with you as quickly as possible to help with your
Steam Service
Are you a Customer (Y or N):

y
Enter First Name and Last intial please:
g
Hello g do you already have an appointment (Y or N):
y
What is your reason for being here?
TV Service (A), Internet Service (B), Cell Phone Service (C),Steam Service (D), Other (E)
c
Happy to meet you g we will be with you as quickly as possible to help with your Cell Phone Service