GIT Department of Computer Engineering CSE 222/505 - Spring 2020 Homework 1.2 Report

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1. SYSTEM REQUIREMENTS

When program starts, system shall create a default admin, user must choose a profile.

Should be 4 type of users. These are:

- 1-Admin
- 2-Branch Employee
- 3-Transportation Personnel
- 4-Customer

If user select **admin**, he/she must enter password(cse222). Admin profile should do 6 different operations(methods). User must select one operations . This operations are:

- 1-Add Branch: User shall enter branch name which want to create. Then program shall create branch with this name.
- 2-Remove Branch: User shall enter branch name which want to remove. Then program shall remove branch which has this name
- 3-Add Branch Employee: Firstly user shall enter branch employee name which want to hire then enter branch name. Afterwards program shall create a branch employee profile with this name.
- 4-Remove Branch Employee: Firstly user shall enter branch employee name which want to remove then enter branch name where branch employee is working. Afterwards program shall remove branch employee profile which has name.
- 5-Add Transportation Personnel: User shall enter name which want to create. Then program shall create transportation employee profile with this name.
- 6-Remove Transportation Personnel: User shall enter name which want to remove. Then program shall remove transportation personnel profile with this name.

If user enter different number than the above . program shall return the main menu.

If user return main menu, must enter password again for enter admin profile.

If user select **branch employee** profile, Firstly user shall enter branch name where branch employee is working then enter branch employee name.

Branch employee profile should do 5 different operations. User must select one operation. This operations are:

1-Create Shipment: User shall enter receiver of the shipment then enter sender of the shipment then tracking number of the shipment and finally enter current status of the shipment. Afterwards program shall create a shipment which has these information.

- 2-Change Shipment Info : DOLDURULACAK , BUTUN BILGILER BASATAM GIRILECEK SEKILDE METOD YAZILACAK
- 3-Remove Shipment: User shall enter tracking number of shipment which want to remove then program shall remove shipment which has this tracking number.
- 4-Create Customer: User shall enter customer name which want to create. Then program shall create a customer profile with this name.
- 5-Remove Customer: User shall enter customer name which want to remove. Then program shall remove customer who has this name.

If user enter different number than the above . program shall return the main menu.

If user select transportation personnel profile, user shall enter transportation personnel name.

Transportation personnel profile should do only 1 operation. This operation is:

-Change Shipment Info: User shall enter tracking number of shipment which want to change information then user shall enter current status of shipment which has this tracking number. Then program shall change current status of shipment.

Tracking personnel shall change current status of shipment when it only delivered.

If user select **customer** profile, user shall enter customer name.

Customer personnel profile should do only 1 operation like transportation personnel. This operation is :

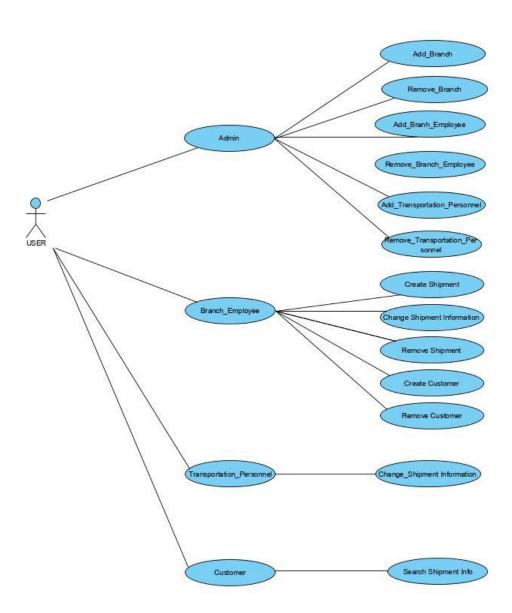
-Search Shipment Info : User shall enter tracking number of shipment which want to see information then program shall print information of shipment.

If user enter invalid input(wrong password, wrong name, wrong number etc.), program shall warn user and ask input again.

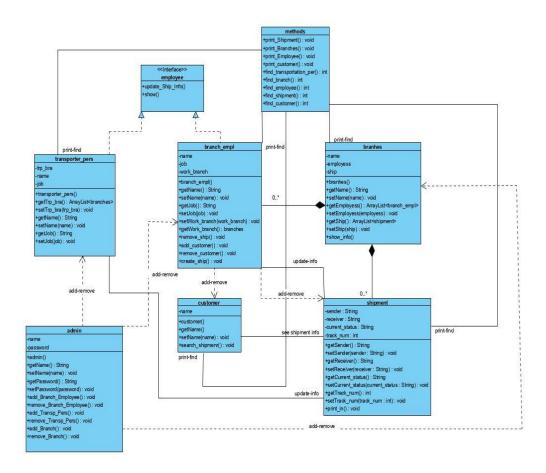
User shall create branch before create branch employee profile and shipment.

After than every operations program shall print information of the operation result(branch list, employee list, shipment information etc.)

2. USE CASE DIAGRAM



3. CLASS DIAGRAM



4. PROBLEM SOLUTION APPROACH

- Customer shall want to learn her\his shipment current status but branch employee did
 not record customer in system. So he\she shall not see the shipment information. That's
 why firstly branch employee shall record customer and he\she give tracking number of
 the shipment to customer then customer shall see the shipment information.
- Transportation personnel shall change shipment current status but shipment did not record in system. Branch employee can only record shipment in the system because of them at first admin shall add branch employee in branch. Afterwards branch employee add shipment in system. Then transportation personnel find shipment with the tracking number and change shipment current status.

4. TEST CASES

All methods were run smoothly. Admin's methods tests:

```
----- ADMIN TEST ------
-----Add Branch-----
DONE
DONE
DONE
Branch Name
                                           : Gebze
Employee Number
Shipment Number
                                           : 0
                                          : 0
Employees :
                                          : Kadikoy
: 0
Branch Name
Employee Number
Shipment Number
                                           : 0
Employees :
Branch Name
                                           : Maltepe
Employee Number
Shipment Number
                                           : 0
Employees :
-----Remove Branch-----
DONE
                                          : Gebze
: 0
: 0
Branch Name
Employee Number
Shipment Number
Employees :
                                          : Kadikoy
: 0
: 0
Branch Name
Employee Number
Shipment Number
Employees :
```

```
-----Add Branch Employee-----
DONE
DONE
DONE
Branch Employees :
Employee Name :Oguzhan
Employee Job :branch_emp
work branch :Gebze
Employee Name :Ayse
Employee Job :branch_emp
work branch :Gebze
Employee Name :Hasan
Employee Job :branch_emp
work branch :Kadikoy
-----Remove Branch Employee-----
Branch Employees :
Employee Name :Oguzhan
Employee Job :branch_e
work branch :Gebze
                         :branch_emp
Employee Name
Employee Job
                        :Hasan
:branch_emp
                         :Kadikoy
work branch
```

```
----Add Transportation Personnel-----
DONE
DONE
Branch Employees :
Employee Name
Employee Job
work branch
                      :Oguzhan
:branch_emp
                       :Gebze
Employee Name
Empl<mark>o</mark>yee Job
work branch
                       :Hasan
                       :branch_emp
                       :Kadikoy
Transportation Employees :
Employee Name
Employee Job
                       :Hatice
                       :transporter
Employee Name
Employee Job
                     :Ahmet
                       :transporter
 -----Remove Transportation Personnel------
DONE
Branch Employees :
Employee Name :Oguzhan
Employee Name
Employee Job
work branch
                       :branch_emp
                       :Gebze
Employee Name
Employee Job
work branch
                       :Hasan
                       :branch_emp
:Kadikoy
Transportation Employees :
Employee Name :Hatice
Employee Name
Employee Job
                       :transporter
```

Branch employee's methods tests:

```
----Create Shipment------
DONE
DONE
DONE
Receiver
                 :Burak
Sender
                 :Melis
                 :in_branch
:10
Status
Tracking Number
Receiver
                 :Berke
Sender
                 :Pelin
Status
                 : on_road
Tracking Number
                      :11
Receiver
                 :Mustafa
Sender
                 :Huseyin
Status
                 :in_brach
Tracking Number
                      :12
-----Change Shipment Status------
DONE
Receiver
                 :Burak
Sender
                 :Melis
Status
                 : on_road
Tracking Number
                      :10
                 :Berke
Receiver
Sender
                 :Pelin
Status
                 :on_road
Tracking Number
                     :11
                 :Mustafa
Receiver
Sender
                 :Huseyin
Status
                 :in_brach
:12
Tracking Number
-----Remove Shipment-----
Receiver
                 :Berke
                 :Pelin
Sender
Status
                 : on_road
Tracking Number
Receiver
                     :11
                 :Mustafa
Sender
                 :Huseyin
Status
                 :in_brach
Tracking Number
                      :12
```

Transportation personnel's methods tests:

```
TRANSPORTATION PERSONNEL TEST -----
DONE
DONE
DONE
DONE
Receiver
                 :Berke
Sender
                 :Pelin
Status
                 :on_road
Tracking Number
Receiver
                      :11
                 :Mustafa
Sender
                 :Huseyin
Status
                 :in_brach
Tracking Number
                      :12
Receiver
                 :Burak
Sender
                 :Melis
Status
                 :in_branch
Tracking Number
                      :10
   -----Change Shipment Status-----
DONE
Receiver
                 :Burak
Sender
                 :Melis
:delivered
Status
                      :10
Tracking Number
```

Customer's methods tests:

```
-----See Shipment Information-----

DONE

Receiver :Burak

Sender :Melis

Status :delivered

Tracking Number :10
```

5.RUNNING AND RESULT

System runs smoothly. There is no error or warning and it does every operation successfully. There are some examples below:

-Admin adds branch

```
Welcome Admin
Enter Password :cse222
Enter Transaction Number
1-Add Branch
2-Remove Branch
3-Add Branch Employee
4-Remove Branch Employee
5-Add Transportation Personel
6-Remove Transportation Personel
7-Return Main Menu
1
Enter Branch Name :Uskudar
DONE
Branch Name : Uskudar
Employee Number : 0
Employees :
```

-Admin adds branch employee

```
Enter Branch Employee Name :Ali
Enter Branch Name :Uskudar
DONE
Branch Employees :
Employee Name :Ali
Employee Job :branch_emp
work branch :Uskudar
```

-Branch employee adds shipment

```
Enter Sender : Ayse
Enter Receiver : Fatma
Enter Tracking Number : 1
Enter Status : on_road
DONE
Receiver :Fatma
Sender :Ayse
Status :on_road
Tracking Number :1
```

-Transportation personnel change shipment's current status

```
Enter Tracking Number : 1
Enter Shipment Status : delivered
DONE
Receiver :Fatma
Sender :Ayse
Status :delivered
Tracking Number :1
```

NOTE: Javadoc file inside the doc file(index.html).