

GIT Department of Computer Engineering
CSE 222/505 - Spring 2020
Homework #1 Part2 Report

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1-SYSTEM REQUIREMENTS

The software is developed on IntelliJ Idea platform and can be executed on this platform but since the software is Java-based, it can be executed on any system Java JDK 8 or more installed.

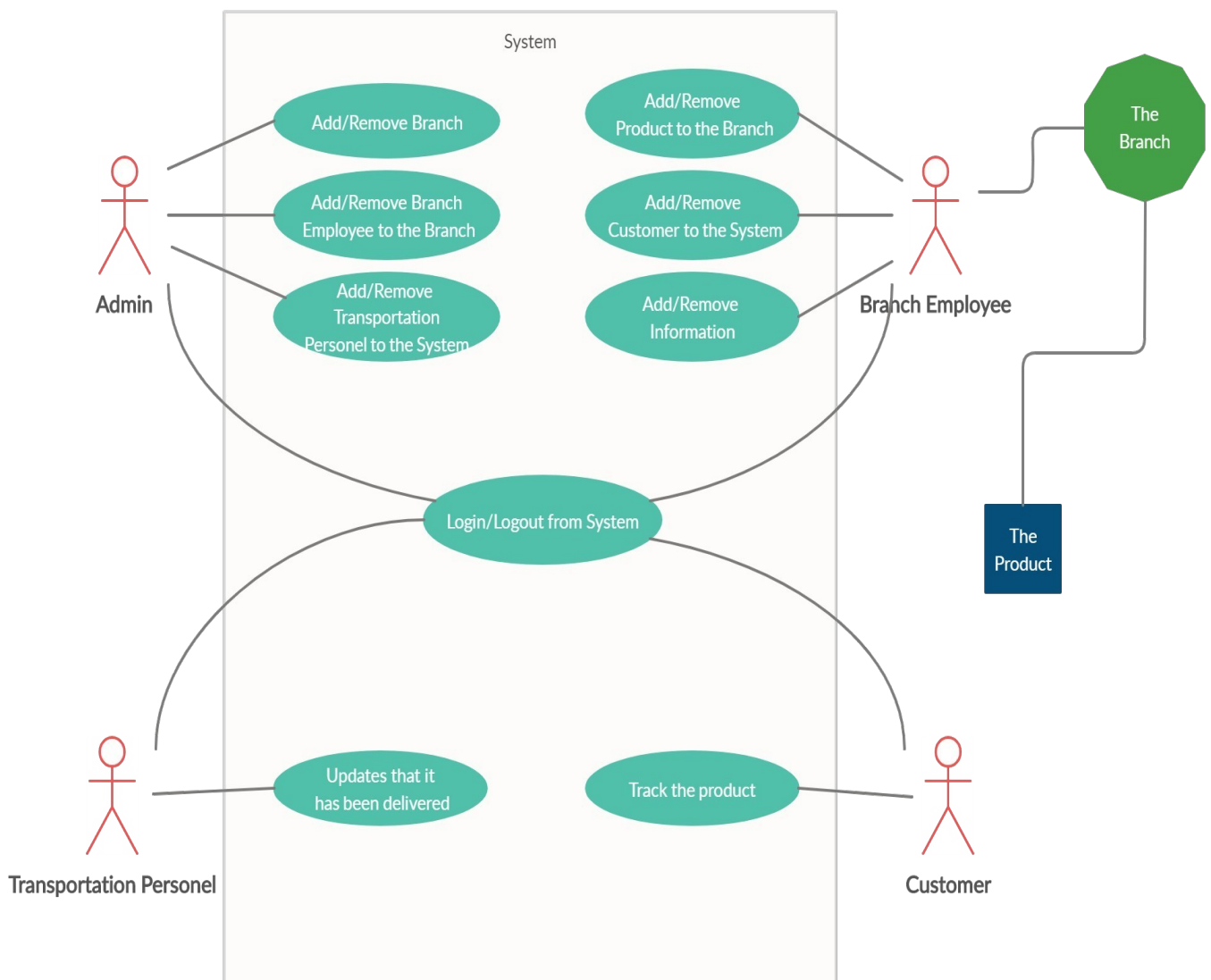
For IntelliJ Idea:

2 GB RAM minimum, 8 GB RAM recommended

3 GB hard disk space, SSD recommended

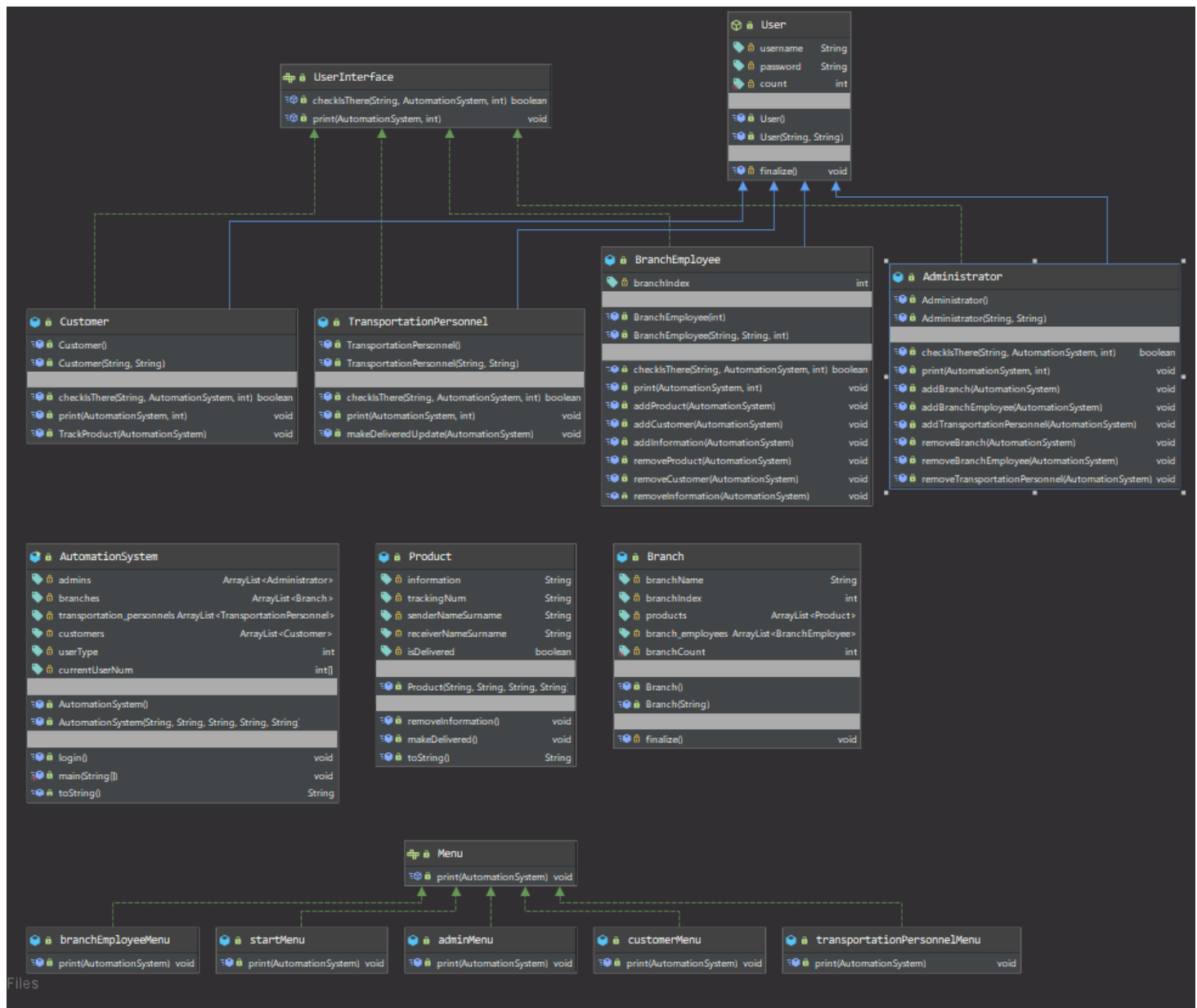
1024x768 minimum screen resolution

2-USE CASE DIAGRAMS

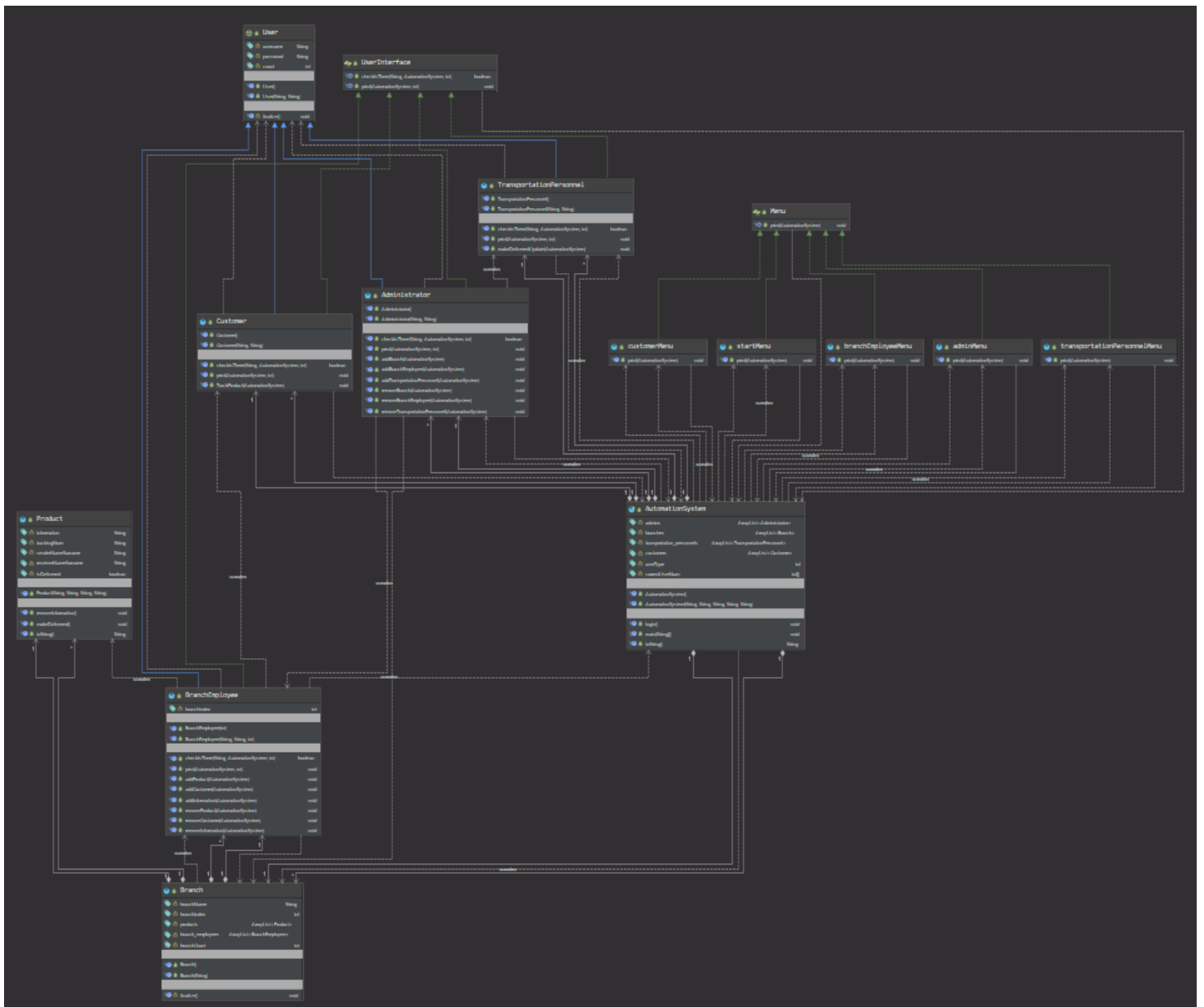


3-CLASS DIAGRAMS

Without showing dependencies:



With showing dependencies:



5-PROGRAM SOLUTION APPROACH

I tried to build a certain things to create a cargo automation system. The automation system includes Admins, Branches, Transportation Personnel and Customers. Branches include Branch members and Products.

In this system, administrators should have the authority to adding and removing branches, adding and removing transport personnel, adding and removing branch employees.

Branch employees should have the authority to adding and removing products, adding and removing customers, adding and removing information.

Transport personnel should have the authority to update the delivery information when they deliver the product.

I also extended the Admin, Transportation Personnel and Branch Employee classes from the 'user' class. In addition, these classes implement the 'UserInterface' interface.

The user class includes the user name and password fields. And other than that, they only have constructors.

The UserInterface has only 2 methods. One of them is the 'checkIsThere' function that checks if is there same string. Other is the 'print' method.

In addition, I created the 'Menu' interface. And I also created 'startMenu', 'adminMenu', 'branchEmployeeMenu', 'transportationPersonnelMenu'. I have implemented the 'Menu' interface in these classes.

In the previous assignment, I did everything with Array. In this assignment, I did everything with ListArray.

When the system is opened, users can log in or log out. In addition to the system, admin can be added. Also, I created the method of printing the system to see the system. And finally I used lots of try catch blocks in the system.

6-TEST CASES

```
A test system was created automatically.
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
2
-Admin(s)
username: admin | password: 1234 (Automatically created)
-----
-Branch(es)
branch name: branch0 (Automatically created)
-----
-Branch Employee(s)
username: branch_employee1 | password: 1234 ( 0.branch ) (Automatically created)
-----
-Product(s)
-----
-Transportation Personnel(s)
username: transportation_personnel2 | password: 1234 (Automatically created)
-----
-Customer(s)

**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
```

```
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
1
Please enter your username
admin
Please enter your password
1234
You have successfully logged in. You are a Administrator.
**** ADMIN MENU ****
**** 1 - Add Branch ****
**** 2 - Remove Branch ****
**** 3 - Add Branch Employee ****
**** 4 - Remove Branch Employee ****
**** 5 - Add Transportation Personnel ****
**** 6 - Remove Transportation Personnel ****
**** 7 - Log Out ****
**** 8 - Exit ****
```

```
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****

1
Please enter your username
branch_employee1
Please enter your password
1234
You have successfully logged in. You are a Branch Employee.
**** BRANCH EMPLOYEE MENU ****
**** 1 - Add Product ****
**** 2 - Remove Product ****
**** 3 - Add Customer ****
**** 4 - Remove Customer ****
**** 5 - Add Information ****
**** 6 - Remove Information ****
**** 7 - Log Out ****
**** 8 - Exit ****
```

```
3
Please enter username of the User
customer1234
Please enter password of the User
1234
Customer is successfully added.
0 : customer1234
**** BRANCH EMPLOYEE MENU ****
**** 1 - Add Product ****
**** 2 - Remove Product ****
**** 3 - Add Customer ****
**** 4 - Remove Customer ****
**** 5 - Add Information ****
**** 6 - Remove Information ****
**** 7 - Log Out ****
**** 8 - Exit ****

7
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****

1
Please enter your username
customer1234
Please enter your password
1234
You have successfully logged in. You are a Customer.
**** CUSTOMER MENU ****
**** 1 - Track the Product ****
**** 2 - Log Out ****
**** 3 - Exit ****

|
```

```
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
1
Please enter your username
transportation_personnel2
Please enter your password
1234
You have successfully logged in. You are a Transportation Personnel.
**** TRANSPORTATION PERSONNEL MENU ****
**** 1 - Make Update ****
**** 2 - Log Out ****
**** 3 - Exit ****
```

```
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
1
Please enter your username
fghjfgfhf
Please enter your password
vbnfdfg
You entered an incorrect username or password.
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
```


7) RUNNING AND RESULTS

```
Please enter your username
admin
Please enter your password
1234
You have successfully logged in. You are a Administrator.
**** ADMIN MENU ****
**** 1 - Add Branch ****
**** 2 - Remove Branch ****
**** 3 - Add Branch Employee ****
**** 4 - Remove Branch Employee ****
**** 5 - Add Transportation Personel ****
**** 6 - Remove Transportation Personel ****
**** 7 - Log Out ****
**** 8 - Exit ****
1
Please enter name of the branch
gursu
Branch is successfully added.
0 : branch0
1 : gursu
**** ADMIN MENU ****
**** 1 - Add Branch ****
**** 2 - Remove Branch ****
**** 3 - Add Branch Employee ****
**** 4 - Remove Branch Employee ****
**** 5 - Add Transportation Personel ****
**** 6 - Remove Transportation Personel ****
**** 7 - Log Out ****
**** 8 - Exit ****
2
Which branch would you like to remove?
0 : branch0
1 : gursu
0
The Branch is successfully removed.
0 : gursu
```

```
**** ADMIN MENU ****
**** 1 - Add Branch ****
**** 2 - Remove Branch ****
**** 3 - Add Branch Employee ****
**** 4 - Remove Branch Employee ****
**** 5 - Add Transportation Personnel ****
**** 6 - Remove Transportation Personnel ****
**** 7 - Log Out ****
**** 8 - Exit ****
3
Please enter username of the Branch employee
hrnalbyrk
Please enter password of the branch employee
9876
Which branch would you like to add?
0 : gursu
0
Branch employee is successfully added.
0 : branch_employee3
1 : hernalbyrk
**** ADMIN MENU ****
**** 1 - Add Branch ****
**** 2 - Remove Branch ****
**** 3 - Add Branch Employee ****
**** 4 - Remove Branch Employee ****
**** 5 - Add Transportation Personnel ****
**** 6 - Remove Transportation Personnel ****
**** 7 - Log Out ****
**** 8 - Exit ****
5
Please enter username of the Transportation personnel
trharunalbayraka
Please enter password of the Transportation personnel
5678
Transportation Personnel is successfully added.
0 : transportation_personnel2
1 : trharunalbayraka
```

```
**** ADMIN MENU ****
**** 1 - Add Branch ****
**** 2 - Remove Branch ****
**** 3 - Add Branch Employee ****
**** 4 - Remove Branch Employee ****
**** 5 - Add Transportation Personnel ****
**** 6 - Remove Transportation Personnel ****
**** 7 - Log Out ****
**** 8 - Exit ****
7
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
2
-Admin(s)
username: admin | password: 1234 (Automatically created)
-----
-Branch(es)
branch name: gursu (Automatically created)
-----
-Branch Employee(s)
username: branch_employee3 | password: 1234 ( 0.branch ) (Automatically created)
username: hrnalbyrk | password: 9876 ( 0.branch )
-----
-Product(s)
-----
-Transportation Personnel(s)
username: transportation_personnel2 | password: 1234 (Automatically created)
username: trharunalbayraka | password: 5678
-----
-Customer(s)
```

Please enter your username

hrnalbyrk

Please enter your password

9876

You have successfully logged in. You are a Branch Employee.

**** BRANCH EMPLOYEE MENU ****

**** 1 - Add Product ****

**** 2 - Remove Product ****

**** 3 - Add Customer ****

**** 4 - Remove Customer ****

**** 5 - Add Information ****

**** 6 - Remove Information ****

**** 7 - Log Out ****

**** 8 - Exit ****

1

Please enter tracking number of the product

KP1234

Please enter Name and Surname of the sender

Harun Albayrak

Please enter Name and Surname of the receiver

Selami Şahin

Please enter information about the product

Teslim Edilmedi.

The Product is successfully added.

0 : KP1234 - Harun Albayrak - Selami Şahin - Teslim Edilmedi.

**** BRANCH EMPLOYEE MENU ****

**** 1 - Add Product ****

**** 2 - Remove Product ****

**** 3 - Add Customer ****

**** 4 - Remove Customer ****

**** 5 - Add Information ****

**** 6 - Remove Information ****

**** 7 - Log Out ****

**** 8 - Exit ****

3

Please enter username of the User

Customer1234

Please enter password of the User

1234

Customer is successfully added.

0 : Customer1234

**** BRANCH EMPLOYEE MENU ****

**** 1 - Add Product ****

**** 2 - Remove Product ****

**** 3 - Add Customer ****

**** 4 - Remove Customer ****

**** 5 - Add Information ****

**** 6 - Remove Information ****

**** 7 - Log Out ****

**** 8 - Exit ****

-Admin(s)

username: admin | password: 1234 (Automatically created)

-Branch(es)

branch name: gursu

-Branch Employee(s)

username: branch_employee3 | password: 1234 (0.branch) (Automatically created)

username: hrnalbyrk | password: 9876 (0.branch)

-Product(s)

tracking number: KP1234 (0.branch) (Teslim Edilmedi.)

-Transportation Personnel(s)

username: transportation_personnel2 | password: 1234 (Automatically created)

username: trharunalbayraka | password: 5678

-Customer(s)

username: Customer1234

**** START MENU ****

**** 1 - Login ****

**** 2 - Print the System ****

**** 3 - Add Admin ****

**** 4 - Exit ****

1

Please enter your username

Customer1234

Please enter your password

1234

You have successfully logged in. You are a Customer.

**** CUSTOMER MENU ****

**** 1 - Track the Product ****

**** 2 - Log Out ****

**** 3 - Exit ****

```
1
Please enter your tracking number
KP1234
Teslim Edilmedi.
**** CUSTOMER MENU ****
**** 1 - Track the Product ****
**** 2 - Log Out ****
**** 3 - Exit ****
2
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
1
Please enter your username
trharunalbayraka
Please enter your password
5678
You have successfully logged in. You are a Transportation Personnel.
**** TRANSPORTATION PERSONNEL MENU ****
**** 1 - Make Update ****
**** 2 - Log Out ****
**** 3 - Exit ****
1
0 : gursu
0
Product(s)
-----
0 : KP1234
0
The product is delivered!
**** TRANSPORTATION PERSONNEL MENU ****
**** 1 - Make Update ****
**** 2 - Log Out ****
**** 3 - Exit ****
```

```
**** TRANSPORTATION PERSONNEL MENU ****
**** 1 - Make Update ****
**** 2 - Log Out ****
**** 3 - Exit ****
2
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
1
Please enter your username
Customer1234
Please enter your password
1234
You have successfully logged in. You are a Customer.
**** CUSTOMER MENU ****
**** 1 - Track the Product ****
**** 2 - Log Out ****
**** 3 - Exit ****
1
Please enter your tracking number
KP1234
It was delivered.
**** CUSTOMER MENU ****
**** 1 - Track the Product ****
**** 2 - Log Out ****
**** 3 - Exit ****
```