

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

Harun ALBAYRAK
171044014

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.

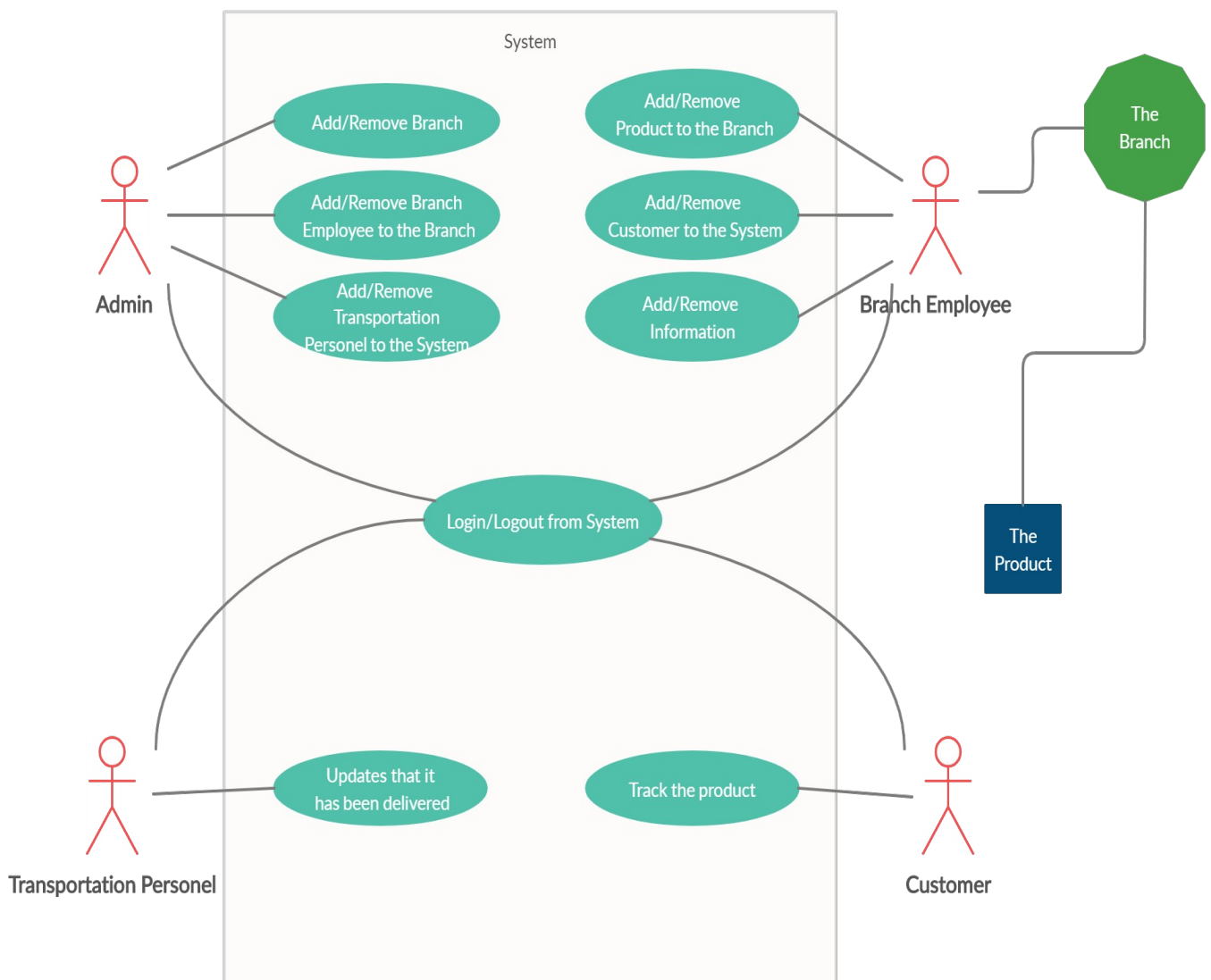
For IntelliJ Idea:

2 GB RAM minimum, 8 GB RAM recommended

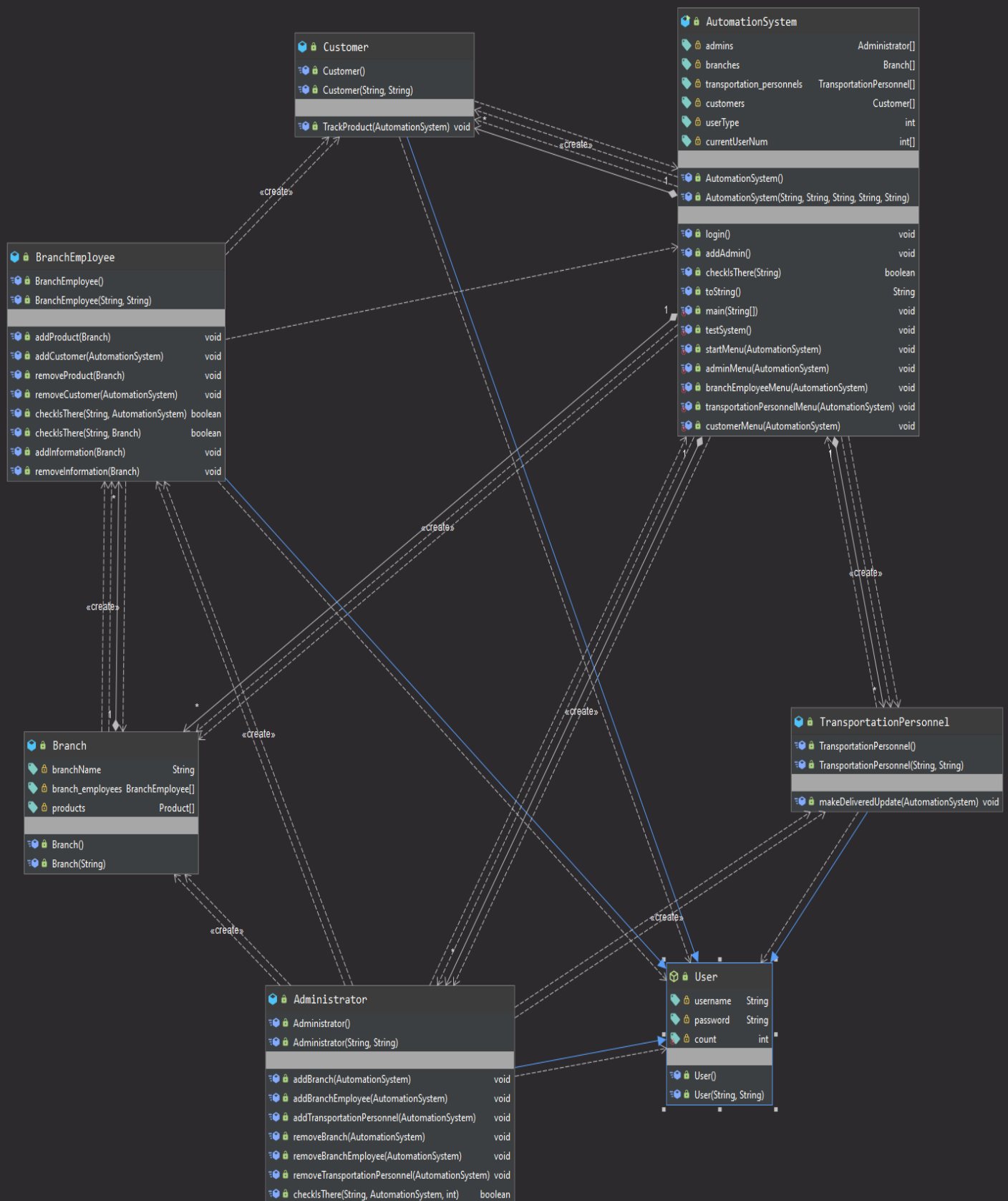
3 GB hard disk space, SSD recommended

1024x768 minimum screen resolution

2-USE CASE DIAGRAMS



3-CLASS DIAGRAMS



5-PROGRAM SOLUTION APPROACH

I tried to build a certain order 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 add and remove branches, add and remove transport personnel, add and remove branch employees

Branch employees should have the authority to add and remove products, add and remove customers, add and remove 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.

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

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.

6-TEST CASES

Firstly, The system is created automatically.

```
A test system was created automatically.
-Admin(s)
username: admin | password: 1234 (Automatically created)
-----
-Branch(es)
branch name: branch (Automatically created)
-----
-Branch Employee(s)
username: branch_employee1 | password: 1234 ( 0.branch )
-----
-Product(s)
-----
-Transportation Personnel(s)
username: transportation_personnel | password: 1234 (Automatically created)
-----
-Customer(s)
```

```

**** 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 Personel ****
**** 6 - Remove Transportation Personel ****
**** 7 - Log Out ****
**** 8 - Exit ****

```

```

**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
1
Please enter your username
asdasd
Please enter your password
1234
You entered an incorrect username or password.
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****

```

```

Please enter your username
customeradd11
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 ****

```

```

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 ****

```

Test cases

```

**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****
1
Please enter your username
transportation_personnel
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

Please enter your password

You entered an incorrect username or password.
**** START MENU ****
**** 1 - Login ****
**** 2 - Print the System ****
**** 3 - Add Admin ****
**** 4 - Exit ****

```

7)RUNNING AND RESULTS

```
A test system was created automatically.
-Admin(s)
username: admin | password: 1234 (Automatically created)
-----
-Branch(es)
branch name: branch (Automatically created)
-----
-Branch Employee(s)
username: branch_employee1 | password: 1234 ( 0.branch )
-----
-Product(s)
-----
-Transportation Personnel(s)
username: transportation_personnel | password: 1234 (Automatically created)
-----
-Customer(s)

**** 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 Personel ****
**** 6 - Remove Transportation Personel ****
**** 7 - Log Out ****
**** 8 - Exit ****
1
Please enter name of the branch
Bursa
Branch is successfully added.
0 : branch
1 : Bursa
**** 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 : branch
1 : Bursa
0
The Branch is successfully removed.
0 : Bursa
**** ADMIN MENU ****
```

```
**** 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
harunalbayrak
Please enter password of the branch employee
12345678
Which branch would you like to add?
0 : Bursa
0
Branch employee is successfully added.
0 : branch_employee3
1 : harunalbayrak
**** 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 ****
4
Which branch would you like to remove the branch employee?
0 : Bursa
0
Which branch employee would you like to remove?
0 : branch_employee3
1 : harunalbayrak
0
The Branch employee is successfully removed.
0 : harunalbayrak
**** 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
haruntransport
Please enter password of the Transportation personnel
98876
Transportation Personnel is successfully added.
0 : transportation_personnel
1 : haruntransport
**** ADMIN MENU ****
**** 1 - Add Branch ****
**** 2 - Remove Branch ****
```

```
A test system was created automatically.
-Admin(s)
username: admin | password: 1234 (Automatically created)
-----
-Branch(es)
branch name: branch (Automatically created)
-----
-Branch Employee(s)
username: branch_employee1 | password: 1234 ( 0.branch )
-----
-Product(s)
-----
-Transportation Personnel(s)
username: transportation_personnel | password: 1234 (Automatically created)
-----
-Customer(s)

**** 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 ****
1
Please enter tracking number of the product
PR1234
Please enter Name and Surname of the sender
Harun Albayrak
Please enter Name and Surname of the receiver
Mehmet Emin
Please enter information about the product
It is not delivered yet.
The Product is successfully added.
0 : PR1234 - Harun Albayrak - Mehmet Emin - It is not delivered yet.
**** 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
customer1
Please enter password of the User
6474
```



```

Customer is successfully added.
0 : customer1
**** 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 ****
2
-Admin(s)
username: admin | password: 1234 (Automatically created)
-----
-Branch(es)
branch name: branch (Automatically created)
-----
-Branch Employee(s)
username: branch_employee1 | password: 1234 ( 0.branch )
-----
-Product(s)
tracking number: PR1234 ( 0.branch ) ( It is not delivered yet. )
-----
-Transportation Personnel(s)
username: transportation_personnel | password: 1234 (Automatically created)
-----
-Customer(s)
username: customer1

**** 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
customer1
Please enter your password
6474
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
PR1234
Name,Surname of Sender : Harun Albayrak
Name,Surname of Receiver : Mehmet Emin
Current Status : It is not delivered yet.

**** CUSTOMER MENU ****
**** 1 - Track the Product ****
**** 2 - Log Out ****
**** 3 - Exit ****

```

```
transportation_personnel
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 ****
1
0 : branch
0
Product(s)
-----
0 : PR1234
0
**** 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 ****
2
-Admin(s)
username: admin | password: 1234 (Automatically created)
-----
-Branch(es)
branch name: branch (Automatically created)
-----
-Branch Employee(s)
username: branch_employee1 | password: 1234 ( 0.branch )
-----
-Product(s)
tracking number: PR1234 ( 0.branch ) ( It was delivered. )
-----
-Transportation Personnel(s)
username: transportation_personnel | password: 1234 (Automatically created)
-----
-Customer(s)
username: customer1

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