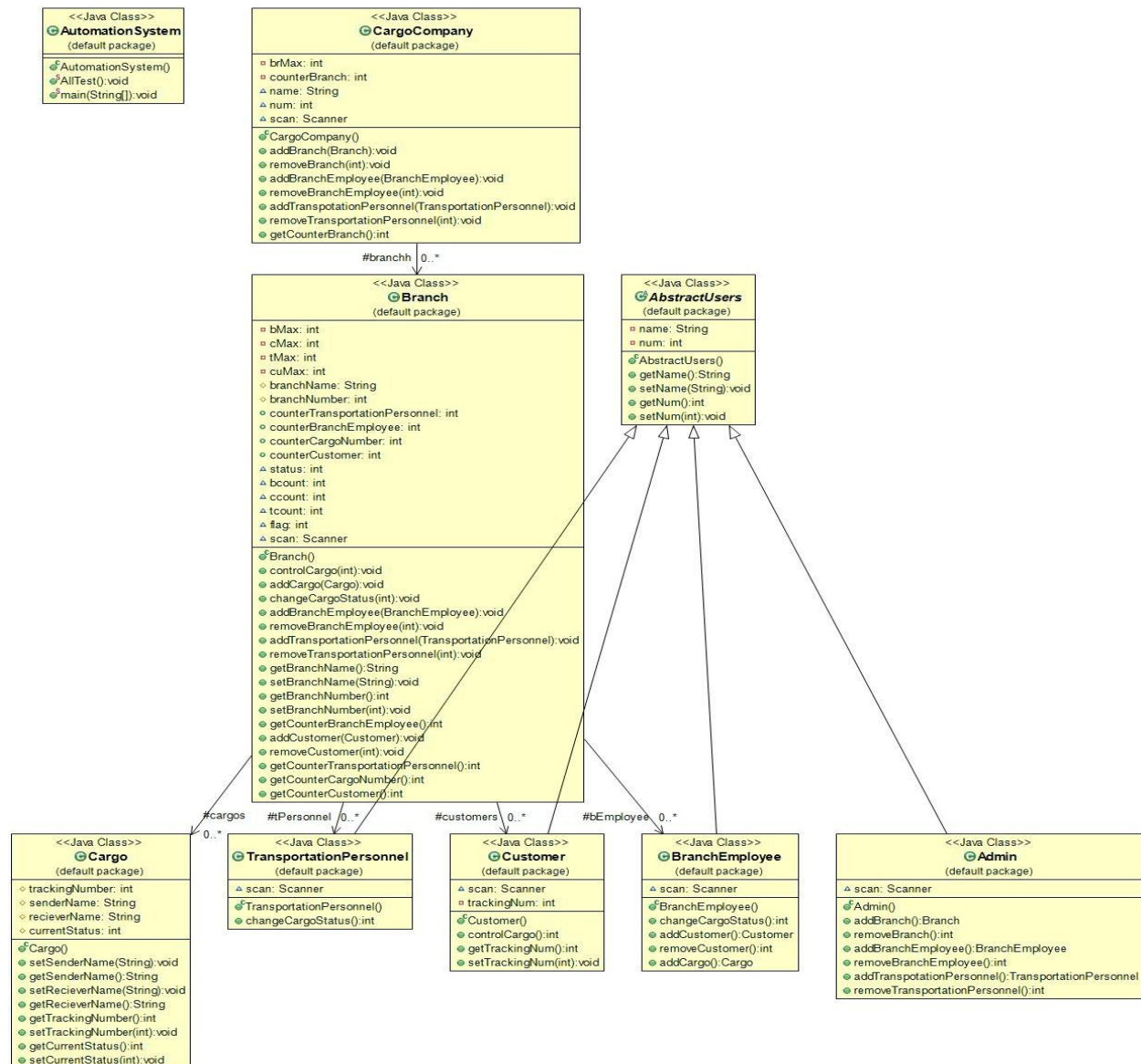


# CARGO COMPANY SYSTEM

I will try to explain my homework in this report



## CLASS DIAGRAM FOR CARGO COMPANY

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You see the class diagram of the cargo company I created above. There is a cargo company with branches array in it. There are branches employees, transportation personnel and cargoes in each class.

## **Branch**

Every branch has an array that keeps its employees and their information. Besides, there is an array that keeps the information of customers and information and cargoes.

## **ADMINISTRATOR**

System administrator capable of add/remove branch, add/remove branch employee, add/remove transportation personnel functions.

## **BRANCH EMPLOYEE**

User who can add or remove transportation personnel, add and remove customers, and change cargo status

## **TRANSPORTATION PERSONNEL**

The user who can update the cargo status when he delivered the cargo.

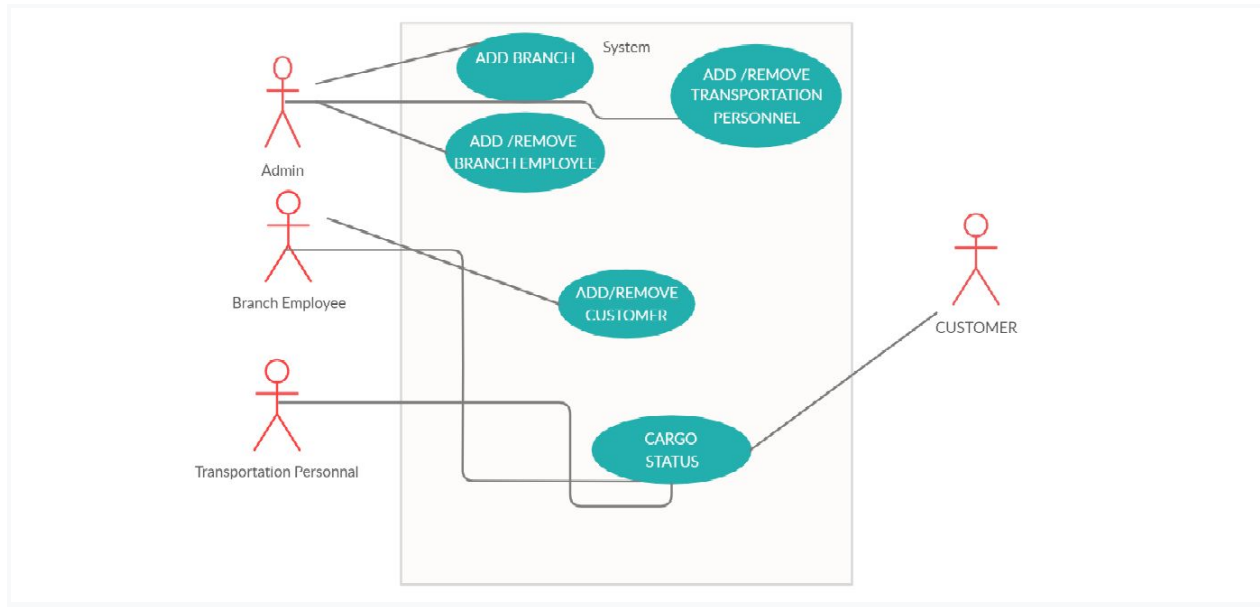
BE and TP can log into the system with branch number and personal id.

## **CUSTOMER**

User who can see the cargo status with the cargo tracking number.

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# USE-CASE DIAGRAM FOR CARGO COMPANY



## TEST CASES and RUNNING COMMAND, RESULTS

In this section, I tried test scenarios for admin, be, tp and customer and reflected the terminal image.

The code has the code written in the alltest method in AutomationSystem class.

The menu options for each user are below.

---

## GENERAL MENU AND ADMINISTRATION MENU

```
Welcome the Cargo company automation system
Please choose your input method
1-)Admin
2-)Branch Employee
3-)Transportation Personal
4-)Customer
5-)Exit
1
Please select operation that you want
1-)Add Branches
2-)Remove Branches
3-)Add Branches Employee
4-)Remove Branches Employee
5-)Add Transportation Personnel
6-)Remove Transportation Personnel
7-)List Branches Employee
8-)List Transportation Personal
```

## BRANCH EMPLOYEE MENU

```
82
Welcome the Cargo company automation system
Please choose your input method
1-)Admin
2-)Branch Employee
3-)Transportation Personal
4-)Customer
5-)Exit
2
82 --- GEBZE
Please enter the your branch number and your branch employe num
Branch Num=82
Branch personal num=14
Please select operation that you want
1-)Add Customer
2-)Remove Customer
3-)Change cargo status
4-)List cargos
```

If wrong information is entered, you are asked to enter it again.

---

## TRANSPORTATION PERSONAL MENU

```
Please choose your input method
1-)Admin
2-)Branch Employee
3-)Transportation Personal
4-)Customer
5-)Exit
3
82 --- GEBZE
Please enter the your branch number and yourTransportation Personal num
Branch Num=82
Transportation personal num=55
Please select operation that you want
1-)Change cargo status
```

## AND ALL TEST

```
welcome to test Scenario for my Cargo Company.
I will try to explain results of choice
Firstly we create CargoCompany object and admin
Now we create 3 branch for my company
1.Branch name is Gebze and branch num is 82
2.Branch name is Darica and branch num is 83
3.Branch name is Cayirova and num is 84.We create this branch for testing to remove branch command.
Now we list to branch
82 --- Gebze
83 --- Darica
84 --- Cayirova
And now we try remove branch(Cayirova) and i will list again all branch
82 --- Gebze
83 --- Darica
Now we test add branches employee so we create branches employee object
1. Ahmet Yilmaz and branch num is 1 and his branch is gebze
Secondly Hasan Arkin in Darica and his num 45
Also we create Ali Ihsan(13) in gebze and Fatma Gunes (5) in darica
Now we listed all Branches Employee for testing AddBranchesEmployee Command
name= Ahmet Yilmaz no= 1
name= Ali Ihsan no= 13
name= Hasan Arkin no= 45
name= Fatma Gunes no= 5
And now we try removeBranchEmployee command and we list again.(Hasan Arkin 45)
name= Ahmet Yilmaz no= 1
name= Ali Ihsan no= 13
name= Fatma Gunes no= 5
Now we will test addTp and remove Tp commands for admin
We create 4 tp and list all.
name Ayse Bal no 4
name Mehmet Turk no 51
name Uraz Alp no 23
name Will Grick no 62
And we remove uraz and list again for remove tp command
name Ayse Bal no 4
name Mehmet Turk no 51
name Will Grick no 62
Yes we finished all commands for administrator and now we try branch employe commands
Firstly we will try add and remove customer.
We create 3 customer Cengiz Söyüncü(88),Hakan Tosun(17),Ozan Ayhan(95)
Now we listed all customers and all cargos
Cargos:
Tracking num: 87 -> from Cengiz Söyüncü to xxxxx
Tracking num: 16 -> from Hakan Tosun to xxxxx
Tracking num: 94 -> from Ozan Ayhan to xxxxx
customerss
Tracking num: 87 -> name: Cengiz Söyüncü
Tracking num: 16 -> name: Hakan Tosun
Tracking num: 94 -> name: Ozan Ayhan
Now we test remove customer(Ozan Ayhan) and listed
Tracking num: 87 -> from Cengiz Söyüncü to xxxxx
Tracking num: 16 -> from Hakan Tosun to xxxxx
Tracking num: 94 -> from Ozan Ayhan to xxxxx
customerss
Tracking num: 87 -> name: Cengiz Söyüncü
Tracking num: 16 -> name: Hakan Tosun
Now we test for Customer and Transportation Personnal
Firstly we control cargos status like customer(Hakans cargo)
your package is in branch yet
```

---

We added 3 branches in order above and then deleted one(ADD/REMOVE BRANCHES FOR ADMIN).

We added 4 branch employee to the branches and then deleted one.(ADD/REMOVE BRANCHES EMPLOYEE FOR ADMIN).

We added 4 transportation personnel to the branches and then deleted one.(ADD/REMOVE TRANSPORTATION PERSONNEL FOR ADMIN).

We added 3 customers to the branches and then deleted one.(ADD/REMOVE CUSTOMERS FOR BRANCH PERSONNEL).

Then we tried to update the shipping status for branch employee and transportation personnel.

Then we checked the cargo status as customer.

ALL RESULTS ARE IN TERMINAL SCREENSHOTS.

---

## PROBLEM SOLUTIONS APPROACH

Fistly,I have created a admin automaticly.Using admin class

Then I created a branch using the admin addbranch method.

AddBranch-->Creates a branch type object and returns it to CargoCompany class.

We add the object to the branch array using the add branches method of CargoCompany.

I used element shift in array to delete branch.

I used similar methods in both branch employee and transportation personnel for both processes.

I used the addcustomer method to create a customer and created the cargo related to that customer in this method.

AddCustomer-->Requests customer related information and creates objects.Sending some information to the addcargo method.

AddCargo-->I create an object from the cargo method and send it to the branch.

I'm adding to the array at the branch.

I'm using the previous logic for remove.

I use the tracking code to update the cargo status with cargostatus method.

CargoStatus-->The function that tells us by checking the status and getting the tracking code.

The customer can find out the status of the cargo just by entering the cargo tracking code.

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