# GIT Department of Computer Engineering CSE 222/505 - Spring 2021 Homework 1 Report

**CANBERK ARICI 171044062** 

### **SYSTEM REQUIREMENTS**

There are 3 types of user in this automation project and they are administrators, branch employees, customers. Administrators can add or remove branches, add or remove branch employees, see all branches and employees, also guery whether there are any products that need to be supplied. Branch employees can check product stock, add or remove product, view previous orders of a customer and make sale. Customers can view product list and search for a product without login, customers have to login to buy a product and view their previous orders or if customer is shopping for the first time, customer will be subscribed to the system and when a customer subscribes to the system, a customer number will be created for this customer. If customers want to buy online, they have to enter their address and phone number. If the company does not have enough number of product that requested by customer, branch employee informs manager(administrator) and the product will be queried and supplied by manager(administrator). When customer buys a product, branch employee updates customer's previous orders and decrements number of the product in stock. System has users that are administrators, branch employees and customers so there should be an interface for the users. This interface is called Person and it has common information of users that are name and surname, getter - setter for name and surname. There should be a class that is for Company. Company class has information about furniture, customers, employees, branches and it is more general than other classes. There are branches of company so there should be a class for branches and it is Branch class. Branch class has information about branches. Branches of company has branch employees so there should be a class for branch employees. Branch Employee class has information about branch employees and methods that are branch employees' actions like making sale, seeing product list, adding product, removing product, checking whether customer is subscribed, subscribing customer to the system, viewing previous orders of a subscribed customer. There should be a class for administrators because system needs a manager. Administrator can take actions about braches, branch employees and products. The administrator class has information about administrator and methods that are administrators' actions like adding branch, removing branch, adding branch employee, removing branch employee, guerying and adding products. Company has customers so there should be a class for customers. Customer class has information of customer and methods that are customers' actions like seeing product list, searching for a product, viewing previous orders and buying product. Also there are products of company so there should be a class for products and it is Furniture class. Furniture class has information about furniture and methods for these information. These classes have connections between them.

## **Functional Requirements:**

#### **Administrator:**

- Adds branch
- Removes branch
- Adds branch employee
- Removes branch employee
- Query product

## **Branch Employee:**

- Inquire about products in stock
- Inform manager that needed product should be purchased
- Add product
- Remove product
- Access the information of the previous orders of a customer by using the customer number
- Update customer's previous orders when customer buys furniture

#### **Customer:**

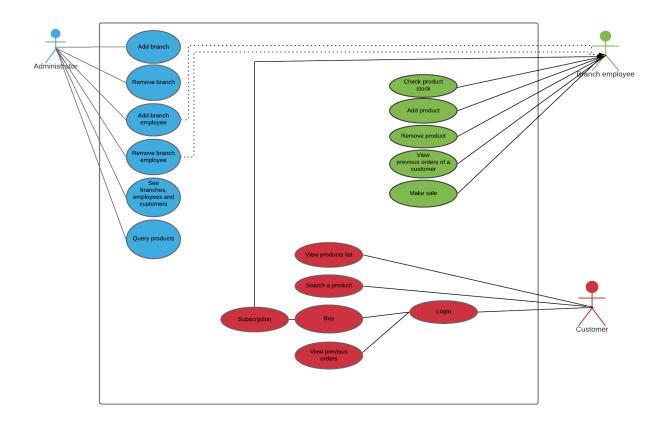
- Search for product
- See the list of products
- See which store a product is in
- Shop online
- View their previous orders

# **Non-Functional Requirements:**

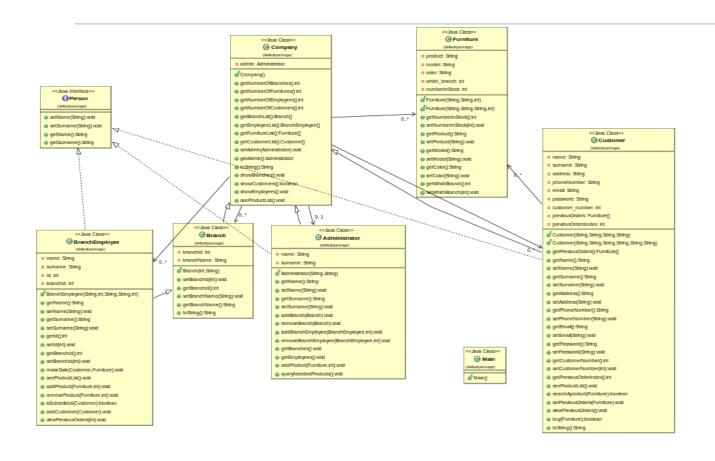
- User friendly interface
- Less needed memory
- Detailed implementation
- Integer value is expected when integer value is needed

<sup>\*</sup> javac version 11.0.10 is used

## **USE CASE DIAGRAMS**



## **CLASS DIAGRAMS**



#### PROBLEM SOLUTIONS APPROACH

There should have been an interface for people that use the system so I created an interface called Person. This interface includes name, surname and their gettersetter methods. I use this interface for Administrator class, Branch Employee class and Customer class. There should have been a general class for Company. Company class has getter-setter methods, overridden to String method, methods for seeing customers, seeing employees, seeing product list. I put arrays of furniture, customers, branch employees, branches. These arrays' types need to be the a class type that serves these arrays purpose. Thus I created these classes: Administrator class, BranchEmployee class, Customer class and Furniture class. Firstly I created Branch class and I set fields of this class as branch id and branch name then I created its getter-setter methods and overrode to String method for this class. Then I created Furniture class, set its fields as product, model, color, which branch(it gives branch's id that has this furniture) and numberInStock(this gives number of product in the stock) and implemented getter-setter methods for fields. I used static keyword for the arrays of Company class because I want to prevent mess about using different arrays by Company class objects. Then I created Branch Employee class, implemented the Person interface for this class, set fields as name, surname, Id that belongs to branch employee, branchId that shows branch of branch employee then created getter-setters of fields(I overrode getter-setters for name and surname) and I created methods for making sale, seeing product list, adding product, removing product, subscribing customer, viewing previous orders of a customer and also branch employee updates customer's previous orders when customer buys a product. Then I created Administrator class, implemented the Person interface for this class, set fields as name and surname, overrode gettersetters for fields, created methods for adding branch, removing branch, adding branch employee, removing branch employee, seeing branch list, seeing employee list, adding product, querying products that need to be supplied. Then I created Customer class, implemented the Person interface for this class, set fields as name, surname, address, phone number, email, password, customer number, previous order index(size of previous orders array), previous orders array then implemented setter-getters for fields, created methods for seeing product list, searching for a product, viewing previous orders, buying furniture and overrode toString method.

#### **TEST CASES**

Pendik, Maltepe and Kadikoy exist as default branches.

Tyrion Lannister, Elon Musk exist as default customers.

John Snow, Arya Stark exist as default branch employees.

Test Case #	Test Case Description
1	Trying to add existing branch (Admin)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
0- EXIT
Please enter your choice:
Welcome Canberk Arici
1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
Please enter branch name that you want to add:
Kadikoy branch is not added because it exists already.
```

Test Case #	Test Case Description
2	Trying to remove nonexistent branch
	(Admin)

```
Welcome Canberk Arici

1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied

Please enter your choice, input will be requested until input is valid:
2
Branches of Company:

Branch Name: Pendik
Branch Id: 1

Branch Name: Maltepe
Branch Id: 2

Branch Name: Kadikoy
Branch Id: 3

Enter "branch id" that you want to remove, input will be requested until input is valid:
4
There is no branch that you wanted.
```

Test Case #	Test Case Description
3	Trying to add branch employee to nonexistent branch(with different branch name from existing ones) (Admin)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
0- EXIT
Please enter your choice:
Welcome Canberk Arici
1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
Branches of Company:
Branch Name: Pendik
Branch Id: 1
Branch Name: Maltepe
Branch Id: 2
Branch Name: Kadikoy
Branch Id: 3
Please enter "branch name" to add a branch employee:
Please enter "branch name" to add a branch employee:
```

Test Case #	Test Case Description
4	Trying to remove a branch employee
	from a nonexistent branch (Admin)

```
Welcome Canberk Arici
1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
4
Employees of Company:
Name: John
Surname: Snow
Employee Id: 1
Branch Id: 1
Branch Name: Pendik
Name: Arya
Surname: Stark
Employee Id: 2
Branch Id: 2
Branch Name: Maltepe
Please enter "branch id" that you want to remove a branch employee:
Input will be requested until input is valid
Please enter "branch id" that you want to remove a branch employee:
Input will be requested until input is valid
```

Test Case #	Test Case Description
5	Trying to add a nonexistent furniture
	(branch employee)

```
Please enter your choice:

    Check product stock.
    Add product.

Remove product.
4- View previous orders of a customer.
5- Make sale.
Enter your choice, input will be requested until input is valid:
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1
Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2
Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1
Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3
Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2
Please enter product name:
SFGSFHD
Please enter model name:
SDAGS
Please enter color:
DSAG
Please enter how many you want to add, input will be requested until input is valid:
Please enter product name:
```

Test Case #	Test Case Description
6	Trying to remove nonexistent furniture
	(branch employee)

```
1- Check product stock.
Add product.
3- Remove product.
4- View previous orders of a customer.
5- Make sale.
Enter your choice, input will be requested until input is valid:
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1
Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2
Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1
Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3
Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2
Product's information will be requested until information is valid.
Please enter product name:
SDAGAS
Please enter model name:
DSGA
Please enter color:
DSAGA
Please enter how many you want to delete, input will be requested until input is not \theta:
Product's information will be requested until information is valid.
Please enter product name:
```

Test Case #	Test Case Description
7	Trying to view nonexistent customer's
	previous orders (branch employee)

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

0- EXIT

Please enter your choice:

2

1- Check product stock.

2- Add product.

4- View previous orders of a customer.

5- Make sale.
Enter your choice, input will be requested until input is valid:

4

Customers of Company:

Name: Tyrion

Surname: Lannister

Customer Number: 1

Name: Elon

Surname: Musk

Customer Number: 2

Please select "customer id" that you want to see its previous orders:
Input will be requested until input is valid:

4

There is no customer with this customer number.
```

Test Case #	Test Case Description
8	Trying to make sale to nonexistent
	customer (Branch employee)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
0- EXIT
Please enter your choice:

    Check product stock.

Add product.
3- Remove product.
4- View previous orders of a customer.
5- Make sale.
Enter your choice, input will be requested until input is valid:
Customers of Company:
Name: Tyrion
Surname: Lannister
Customer Number: 1
Name: Elon
Surname: Musk
Customer Number: 2
Please select "customer id" that you want to make sale:
Input will be requested until input is valid:
Please select "customer id" that you want to make sale:
Input will be requested until input is valid:
```

Test Case #	Test Case Description
9	Trying to sale nonexistent furniture to a
	customer

```
5- Make sale.
Enter your choice, input will be requested until input is valid:
5
Customers of Company:
Name: Tyrion
Surname: Lannister
Customer Number: 1
Name: Elon
Surname: Musk
Customer Number: 2
Please select "customer id" that you want to make sale:
Input will be requested until input is valid:
Product: Office Chair
Model: Ml
Color: Red
Number in stock: 1
Branch: 1
Product: Meeting Table
Model: Ml
Color: Blue
Number in stock: 2
Branch: 2
Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1
Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3
Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2
```

```
Please enter product name:
fdssh
Please enter model name:
sdagds
Please enter color:
dsag
Please enter product name:
```

Test Case #	Test Case Description
10	Trying to log in with information of
	nonexistent customer (Customer)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
0- EXIT
Please enter your choice:
1- Login.
2- View products list.
3- Search a product.
4- Buy
5- View previous orders.
Enter your choice, input will be requested until input is valid:
Log In
Please enter your email
dsagag@gmail.com
Please enter your password
safasff
There is no customer with given email or password
```

Test Case #	Test Case Description
11	Trying to search a nonexistent product

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
θ- EXIT
Please enter your choice:
1- Login.
View products list.
Search a product.
4- Buy
View previous orders.
Enter your choice, input will be requested until input is valid:
Please enter product name:
fdshd
Please enter model name:
fsdhd
Please enter color:
dasgs
Sorry, we couldn't find product you wanted.
```

Test Case #	Test Case Description
12	Trying to buy furniture without logging
	in

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

0- EXIT

Please enter your choice:

3

1- Login.

2- View products list.

3- Search a product.

4- Buy

5- View previous orders.
Enter your choice, input will be requested until input is valid:

4

If you are a subscribed customer please login else you have to subscribe to buy a product.

If you are a subscribed customer please enter yes else no:

yes

Please login first
```

Test Case #	Test Case Description
13	Trying to view previous orders without
	logging in

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

0- EXIT

Please enter your choice:

3

1- Login.

2- View products list.

3- Search a product.

4- Buy

5- View previous orders.
Enter your choice, input will be requested until input is valid:

5

You have to log in firstly to see previous orders.
```

#### **RUNNING COMMAND AND RESULTS**

# 1) Adding branch (Admin)

```
Welcome Canberk Arici
1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
l
Please enter branch name that you want to add:
Adana
Adana branch is added.
Branches of Company:
Branch Name: Pendik
Branch Id: 1
Branch Name: Maltepe
Branch Id: 2
Branch Name: Kadikoy
Branch Id: 3
Branch Name: Adana
Branch Id: 4
```

# 2) Removing branch (Admin)

```
Welcome Canberk Arici
1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
2
Branches of Company:
Branch Name: Pendik
Branch Id: 1
Branch Name: Maltepe
Branch Id: 2
Branch Name: Kadikoy
Branch Id: 3
Branch Name: Adana
Branch Id: 4
Enter "branch id" that you want to remove, input will be requested until input is valid:
4
Adana is removed
Branches of Company:
Branch Name: Pendik
Branch Id: 1
Branch Name: Maltepe
Branch Id: 2
Branch Name: Kadikoy
Branch Id: 3
```

## 3) Adding branch employee (Admin)

```
Welcome Canberk Arici
1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
3
Branches of Company:
Branch Name: Pendik
Branch Id: 1
Branch Name: Maltepe
Branch Id: 2
Branch Name: Kadikoy
Branch Id: 3
Please enter "branch name" to add a branch employee:
Kadikoy
Please enter employee name:
Sundar
Please enter employee surname:
Pichai
Sundar Pichai is added to Kadikoy
Employees of Company:
Name: John
Surname: Snow
Employee Id: 1
Branch Id: 1
Branch Name: Pendik
Name: Arya
Surname: Stark
Employee Id: 2
Branch Id: 2
Branch Name: Maltepe
Name: Sundar
Surname: Pichai
Employee Id: 3
Branch Id: 3
Branch Name: Kadikoy
```

### 4) Removing branch employee (Admin)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
θ- EXIT
Please enter your choice:
Welcome Canberk Arici
1- Add a branch
2- Remove a branch
3- Add a branch employee
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
Employees of Company:
Name: John
Surname: Snow
Employee Id: 1
Branch Id: 1
Branch Name: Pendik
Name: Arya
Surname: Stark
Employee Id: 2
Branch Id: 2
Branch Name: Maltepe
Please enter "branch id" that you want to remove a branch employee:
Input will be requested until input is valid
Enter "employee id" that you want to remove:
Input will be requested until input is valid
Arya Stark is removed from Maltepe
Employees of Company:
Name: John
Surname: Snow
Employee Id: 1
Branch Id: 1
Branch Name: Pendik
```

# 5) See all branches, employees and customers (Admin)

```
4- Remove a branch employee
5- See all branches, employees and customers
6- Query products that need to be supplied
Please enter your choice, input will be requested until input is valid:
5
Branches of Company:
Branch Name: Pendik
Branch Id: 1
Branch Name: Maltepe
Branch Id: 2
Branch Name: Kadikoy
Branch Id: 3
Employees of Company:
Name: John
Surname: Snow
Employee Id: 1
Branch Id: 1
Branch Name: Pendik
Name: Arya
Surname: Stark
Employee Id: 2
Branch Id: 2
Branch Name: Maltepe
Customers of Company:
Name: Tyrion
Surname: Lannister
Customer Number: 1
Name: Elon
Surname: Musk
Customer Number: 2
```

# 6) Query products that need to be supplied (Admin)

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

0- EXIT

Please enter your choice:

1

Welcome Canberk Arici

1- Add a branch

2- Remove a branch

3- Add a branch employee

4- Remove a branch employee

5- See all branches, employees and customers

6- Query products that need to be supplied

Please enter your choice, input will be requested until input is valid:

6

There is no product that need to be supplied
```

# 7) Check product stock (Branch Employee)

```
WELCOME:

1- Login as Admin
2- Login as Branch Employee
3. Login as Customer
0- EXIT
Please enter your choice:
2

1- Check product stock.
2- Add product.
3- Remove product.
4- View previous orders of a customer.
5- Make sale.
Enter your choice, input will be requested until input is valid:
1
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1

Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2

Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1

Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3

Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2

Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2
```

## 8) Add product (Branch Employee)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
θ- EXIT
Please enter your choice:

    Check product stock.
    Add product.

3- Remove product.
4- View previous orders of a customer.
5- Make sale.
Enter your choice, input will be requested until input is valid:
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1
Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2
Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1
Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3
Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2
Please enter product name:
Bookcase
Please enter model name:
M2
Please enter color:
None
```

```
Please enter product name:
Bookcase
Please enter model name:
M2
Please enter color:
None
Please enter how many you want to add, input will be requested until input is valid:
2
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1
Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2
Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1
Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3
Product: Bookcase
Model: M2
Color: None
Number in stock: 3
Branch: 2
```

## 9) Remove product (Branch Employee)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
θ- EXIT
Please enter your choice:

    Check product stock.
    Add product.

3- Remove product.
4- View previous orders of a customer.
5- Make sale.
Enter your choice, input will be requested until input is valid:
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1
Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2
Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1
Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3
Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2
```

```
Product's information will be requested until information is valid.

Please enter product name:

Office Chair

Please enter color:

Red

Please enter how many you want to delete, input will be requested until input is not 0:

1

Office Chair with model M1 is removed by 1

Product: Meeting Table
Model: M1

Color: Blue
Number in stock: 2

Branch: 2

Product: Office Cabinet
Model: M2

Color: Brown
Number in stock: 2

Branch: 1

Product: Office Desk
Model: M3

Color: Green
Number in stock: 3

Branch: 3

Product: Bookcase
Model: M2

Color: None
Number in stock: 1

Branch: 2
```

### 10) View previous orders of a customer (Branch Employee)

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

9- EXIT

Please enter your choice:

2

1- Check product stock.

2- Add product.

3- Remove product.

4- View previous orders of a customer.

5- Make sale.

Enter your choice, input will be requested until input is valid:

4

Customers of Company:

Name: Tyrion

Surname: Lannister

Customer Number: 1

Name: Elon

Surname: Musk

Customer Number: 2

Please select "customer id" that you want to see its previous orders:
Input will be requested until input is valid:

1

There is no previous order.
```

### 11) Make sale (Branch Employee)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
Θ- EXIT
Please enter your choice:

    Check product stock.
    Add product.

 Remove product.

4- View previous orders of a customer.
5- Make sale.
Enter your choice, input will be requested until input is valid:
Customers of Company:
Name: Tyrion
Surname: Lannister
Customer Number: 1
Name: Elon
Surname: Musk
Customer Number: 2
```

```
Please select "customer number" that you want to make sale:
Input will be requested until input is valid:
1
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1

Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2

Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1

Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3

Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2

Please enter product name:
Bookcase
Please enter model name:
M2
Please enter color:
None
Sale is done.
```

## 12) Login (Customer)

(If a customer logs in, he/she remains logged in until new login is done by different person)

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

9- EXIT

Please enter your choice:

3

1- Login.

2- View products list.

3- Search a product.

4- Buy

5- View previous orders.
Enter your choice, input will be requested until input is valid:

1

Log In

Please enter your email

tl@gmail.com

Please enter your password

tl123

Log in successful.
```

### 13) View product list (Customer)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee

    Login as Customer
    EXIT

Please enter your choice:
1- Login.
View products list.

 Search a product.

4- Buy
View previous orders.
Enter your choice, input will be requested until input is valid:
2
Product: Office Chair
Model: M1
Color: Red
Number in stock: 1
Branch: 1
Product: Meeting Table
Model: M1
Color: Blue
Number in stock: 2
Branch: 2
Product: Office Cabinet
Model: M2
Color: Brown
Number in stock: 2
Branch: 1
Product: Office Desk
Model: M3
Color: Green
Number in stock: 3
Branch: 3
Product: Bookcase
Model: M2
Color: None
Number in stock: 1
Branch: 2
```

## 14) Search a product (Customer)

```
WELCOME!
1- Login as Admin
2- Login as Branch Employee
3- Login as Customer
0- EXIT
Please enter your choice:
1- Login.
View products list.

 Search a product.

4- Buy
5- View previous orders.
Enter your choice, input will be requested until input is valid:
Please enter product name:
Office Chair
Please enter model name:
M1
Please enter color:
Red
There is this type of office furniture in the stock.
```

## 15) Buy in store (Customer)

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

0- EXIT

Please enter your choice:

3

1- Login.

2- View products list.

3- Search a product.

4- Buy

5- View previous orders.
Enter your choice, input will be requested until input is valid:

4

Do you want to buy online? Please write yes or no.

no

Please enter product name you want to buy:

Office Chair

Please enter model name you want to buy:

M1

Please enter color:

Red

Please enter how many you want, input will be requested until input is valid:

1

Sale is done.
```

# 16) Buy online (Customer)

```
WELCOME!

1- Login as Admin

2- Login as Customer

0- EXIT

Please enter your choice:

3

1- Login.

2- View products list.

3- Search a product.

4- Buy

5- View previous orders.
Enter your choice, input will be requested until input is valid:

4

Do you want to buy online? Please write yes or no.

yes

Please enter your address:
Istanbul, besiktas

Please enter your phone number:
05421231212

Please enter product name you want to buy:
Meeting Table
Please enter model name you want to buy:
Ml

Please enter color:
Blue

Please enter how many you want, input will be requested until input is valid:

Sale is done.
```

# 17) Creating subscription at first buying (Customer)

(If someone subscribes then he/she remains logged in until different person logs in)

```
WELCOME!
 1- Login as Admin
2- Login as Branch Employee
 3- Login as Customer
 0- EXIT
 Please enter your choice:
1- Login.
2- View products list.
3- Search a product.
4- Buy
5- View previous orders.
Enter your choice, input will be requested until input is valid:
If you are a subscribed customer please login else you have to subscribe to buy a product.
If you are a subscribed customer please enter yes else no:
no
Please enter your name:
Michael
Please enter your surname:
Scofield
Please enter your email:
 ms@gmail.com
Please enter your password:
12345
Michael Scofield is subscribed.
Do you want to buy online? Please write yes or no.
 no
Please enter product name you want to buy:
Office Chair
Please enter model name you want to buy:
Please enter many you want, input will be requested until input is valid:
Please enter how many you want, input will be requested until input is valid:
```

# 18) View previous orders (Customer)

```
WELCOME!

1- Login as Admin

2- Login as Branch Employee

3- Login as Customer

0- EXIT

Please enter your choice:

3

1- Login.

2- View products list.

3- Search a product.

4- Buy

5- View previous orders.
Enter your choice, input will be requested until input is valid:

5

Previous Orders:

Product: Office Chair.

Model: M1.

Color: Red.
```