

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

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1. SYSTEM REQUIREMENTS

The automation system for a company that sells office furnitures. The system has users such as administrators, branch employees and customer. Administrators manage the system by adding and removing branches and branch employees. Branch employees add and remove customers to the system. Branch employees can inquire about the products in stock, query the stocks of the products, add and remove product, take orders and sells, access the information of the previous orders of a customer by using the customer number. Branch employees can update the customers' previous orders section during their sales. Customers can search for products, see the list of products, see which store a product is in and view their previous orders.

First of all, a company must be created. Company's constructor create default admin

```
public Company(String companyName)
```

```
Admin admin1 = new Admin( name: "admin", surname: "admin", email: "admin@gmail.com", password: "1234", company: this);
```

Then automation system must be created with company

```
public AutomationSystem(String name, Company company){
```

Administrator can add and remove branches and branch employees.

```
public boolean addBranch(int branchCode){
```

```
public boolean removeBranch(int branchCode)
```

```
public boolean addBranchEmployee(int branchCode, String name, String surname, String email ,String password)
```

```
public boolean removeBranchEmployee(int branchCode, int userID)
```

Branch employees can add and remove customer and products.

```
public boolean addUser(String name, String surname, String email, String password)
```

```
public boolean removeUser(int userID){
```

```
public void addProduct(Furniture furniture)
```

```
public boolean removeProduct(Furniture furniture)
```

Branch employee can take orders and sells, access the information of the previous orders of a customer by using the customer number.

```
public void printPreviousOrders(int userID)
```

```
public void newOrder(int userID, OfficeChair.ChairModel model, Furniture.Color color)
```

```
public void newOrder(int userID, MeetingTable.MeetingTableModel model, Furniture.Color color)
```

```
public void newOrder(int userID, OfficeDesk.OfficeDeskModel model, Furniture.Color color)
```

```
public void sale(int userID)
```

```
public int getStock(Furniture fr)
```

```
public void increaseStock(Furniture fr)
```

```
public void decreaseStock(Furniture fr)
```

Customer can search for products, see the list of products, see which store a product is in and view their previous orders.

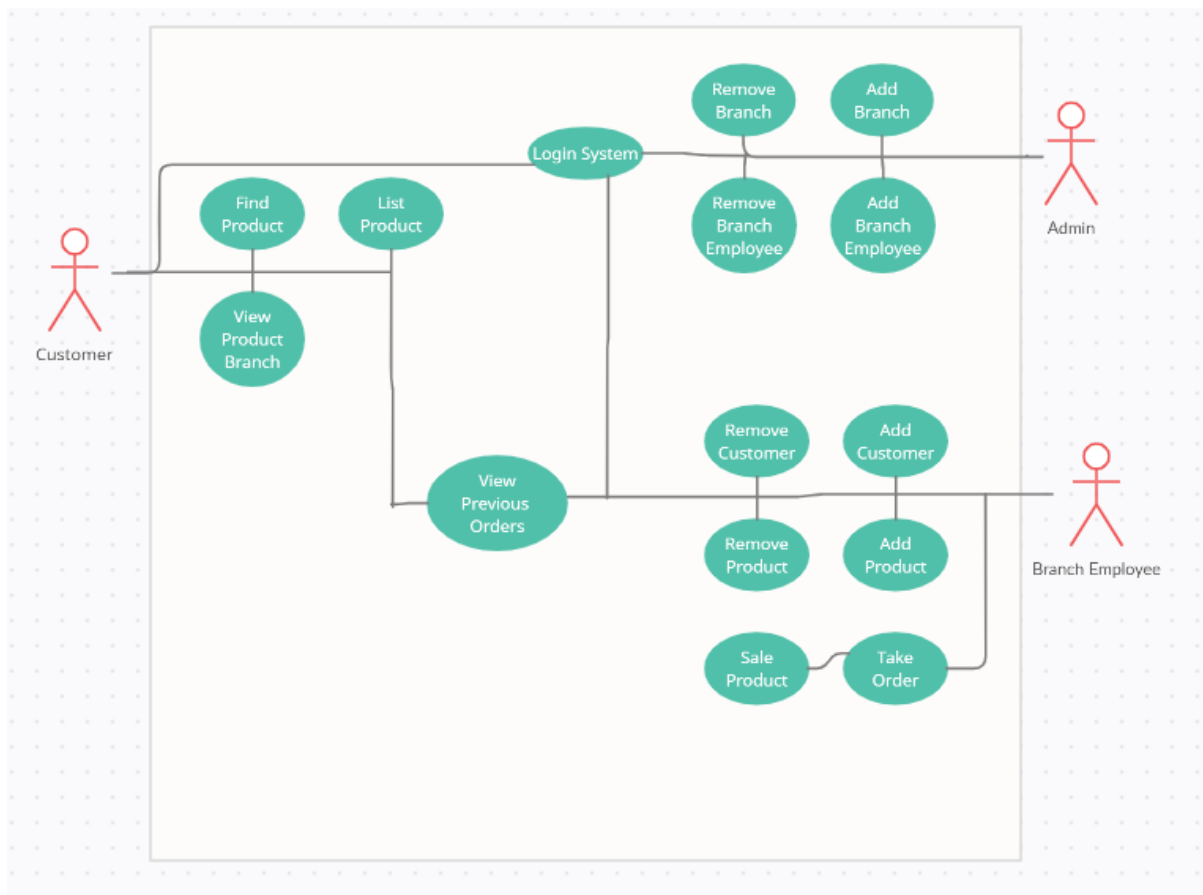
```
public void findProduct(Company company, Furniture fr)
```

```
public void listProducts(Branch branch)
```

```
public void printProductsBranch(Company company, Furniture fr)
```

```
public void printPreviousOrders()
```

2. USE CASE AND CLASS DIAGRAMS



3. RUNNING AND RESULTS

- Admin

```
### Login to system as Admin ###
Login successful: admin admin

### Add branch ###
Branch: 1
Branch: 2
Branch: 3
Branch: 4

### Remove branch ###
Branch: 1
Branch: 2

### Add branch employee ###
Name: be1 be1 email: be1@gmail.com ID: 955091 Branch: 1
Name: be3 be3 email: be3@gmail.com ID: 620789 Branch: 1
Name: be2 be2 email: be2@gmail.com ID: 804734 Branch: 2
Name: be4 be4 email: be4@gmail.com ID: 758004 Branch: 2

### Remove branch employee ###
Name: be1 be1 email: be1@gmail.com ID: 955091 Branch: 1
Name: be2 be2 email: be2@gmail.com ID: 804734 Branch: 2
```

- **Branch employee**

Login to system as branch employee

Login successful: be1 be1 Branch: 1

Add customer

Successful: Murat Saribas ID: 356578

Successful: Veli Kemal ID: 706912

Successful: Enes Ozgur ID: 567788

Successful: Bilal Eksi ID: 791231

Total Customer: 4

Remove customer

Name: Murat Saribas ID: 356578

Name: Veli Kemal ID: 706912

Name: Bilal Eksi ID: 791231

Total Customer: 3

Prints the customer's previous orders

Order history is blank!

Create and add/increase office chair

Product added

Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200

Product added

Office Chair: CHAIR_MODEL2 Color: RED Code: 201

Product added

Office Chair: CHAIR_MODEL1 Color: BLACK Code: 200

Product added

Office Chair: CHAIR_MODEL2 Color: GREEN Code: 201

```
### Create and add/increase office desk ###
Product added
Office Desk: MODEL1 Color: WHITE Code: 300
Product added
Office Desk: MODEL2 Color: BLACK Code: 301
Product added
Office Desk: MODEL3 Color: WHITE Code: 302
Product added
Office Desk: MODEL4 Color: GREEN Code: 303

### Create and add/increase meeting table ###
Product added
Meeting Table : MODEL1 Color: WHITE Code: 100
Product added
Meeting Table : MODEL2 Color: BLACK Code: 101
Product added
Meeting Table : MODEL3 Color: WHITE Code: 102
Product added
Meeting Table : MODEL4 Color: GREEN Code: 103

### Print stock of the furniture ###
Stock: 5
Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200
Stock: 4
Office Chair: CHAIR_MODEL2 Color: RED Code: 201
Stock: 7
Office Desk: MODEL1 Color: WHITE Code: 300
Stock: 3
Meeting Table : MODEL1 Color: WHITE Code: 100
Stock: 4
Meeting Table : MODEL2 Color: BLACK Code: 101
```

```
### Remove product ###
Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200
Meeting Table : MODEL2 Color: BLACK Code: 101
Office Chair: CHAIR_MODEL1 Color: BLACK Code: 200
Office Chair: CHAIR_MODEL2 Color: GREEN Code: 201
Office Desk: MODEL1 Color: WHITE Code: 300
Office Desk: MODEL2 Color: BLACK Code: 301
Meeting Table : MODEL3 Color: WHITE Code: 102
Office Desk: MODEL4 Color: GREEN Code: 303
Meeting Table : MODEL1 Color: WHITE Code: 100
```

```
### Taking orders and selling ###
Stocks before sale:
Stock: 5
Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200
Stock: 7
Office Desk: MODEL1 Color: WHITE Code: 300
Stock: 3
Meeting Table : MODEL1 Color: WHITE Code: 100
```

```
Stocks after sale:
Stock: 4
Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200
Stock: 6
Office Desk: MODEL1 Color: WHITE Code: 300
Stock: 2
Meeting Table : MODEL1 Color: WHITE Code: 100
```

```
### Prints the customer's previous orders ###
Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200
Office Desk: MODEL1 Color: WHITE Code: 300
Meeting Table : MODEL1 Color: WHITE Code: 100
```

- Customer


```
### Login to system as customer ###  
Login successful: Murat Saribas
```

```
### Find product ###
```

```
Branch: 1  Stock: 4  
Branch: 2  Stock: 0  
Branch: 1  Stock: 0  
Branch: 2  Stock: 0  
Branch: 1  Stock: 6  
Branch: 2  Stock: 0  
Branch: 1  Stock: 4  
Branch: 2  Stock: 0  
Branch: 1  Stock: 2  
Branch: 2  Stock: 0  
Branch: 1  Stock: 4  
Branch: 2  Stock: 0
```

```
### List products in the branch ###
```

```
Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200  
Meeting Table : MODEL2 Color: BLACK Code: 101  
Office Chair: CHAIR_MODEL1 Color: BLACK Code: 200  
Office Chair: CHAIR_MODEL2 Color: GREEN Code: 201  
Office Desk: MODEL1 Color: WHITE Code: 300  
Office Desk: MODEL2 Color: BLACK Code: 301  
Meeting Table : MODEL3 Color: WHITE Code: 102  
Office Desk: MODEL4 Color: GREEN Code: 303  
Meeting Table : MODEL1 Color: WHITE Code: 100
```

```
### Find the branch where the product is located ###
```

```
Branch: 1  
Product not found  
Branch: 1  
Branch: 1  
Product not found
```

```
### Prints previous orders ###
```

```
Office Chair: CHAIR_MODEL1 Color: BLUE Code: 200  
Office Desk: MODEL1 Color: WHITE Code: 300  
Meeting Table : MODEL1 Color: WHITE Code: 100
```