GIT Department of Computer Engineering CSE 222/505 - Spring 2021 Homework 3 Report

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1. SYSTEM REQUIREMENTS

Admins controls and manipulates the system by adding/removing branches and employees.

Customers can choose a branch and look for products, buy products online.

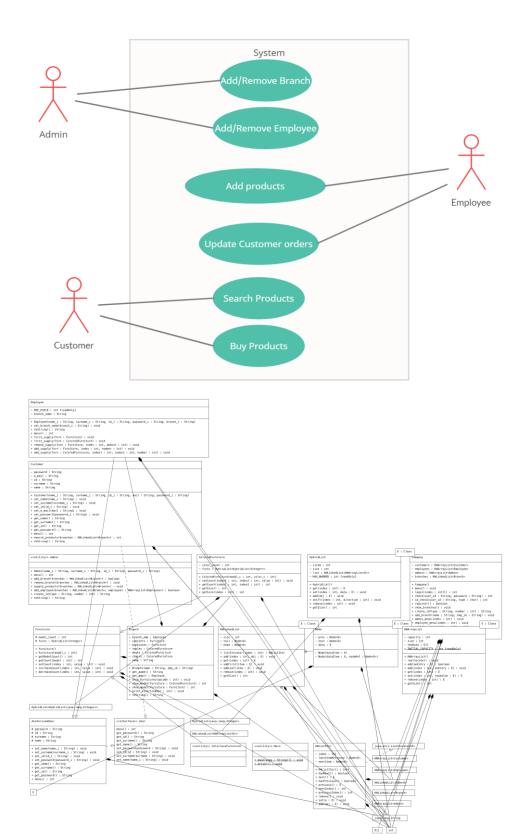
Customers can look his/her previous orders.

Employees can check the product situation and inform admin about need of supplies.

Employees can remove/add customers to the system.

Employees can update customers preivous orders.

2. USE CASE AND CLASS DIAGRAMS



3. PROBLEM SOLUTION APPROACH

In HybridList, on remove actions I shifted objects between arraylists. Otherwise it would be non-efficient.

Created 2 new classes, Furniture, ColoredFurniture.

Furniture class is made for the furnitures that only has models.

ColoredFurniture class extends from Furniture, has color type too.

In my Furniture classes, I have a Hybridlist<Integer> that holds the amount of objects. In Furniture Hybridlist<Integer>, in ColoredFurniture Hybridlist< Hybridlist<Integer>>. Because making Furniture class as just holds model type and color type, in our Branch class it is hard to keep track of counts of a spesific furniture. For example when adding chair that has model A and color B to my Furnitures Hybridlist, everytime I had to check the object's type and color and hold another data structure for count of furnitures. It wouldn't be so optimal.

Test Cases

```
Welcome to our Furniture Shop!

1. Login
2. Register
3. Exit
Choice: 1
Please enter your ID:
12
Please enter your password:
soffs
Invalid id/password. Please try again.
```

```
Welcome to our Furniture Shop!
1. Login
2. Register
3. Exit
Choice: 1
Please enter your ID:
Please enter your password:
You have successfully entered the shop.
Anil Ulasan
A001
1. Add new branch
2. Remove a branch
3. Supply products
4. Add Employee
5. Exit
Choice:
```

- 1. Add new branch
- 2. Remove a branch
- 3. Supply products
- 4. Add Employee
- 5. Exit

Choice:

1

Please enter where you want to open a new branch:

Kutahya

- 1. Add new branch
- 2. Remove a branch
- 3. Supply products
- 4. Add Employee
- 5. Exit

Choice:

2

- 1. Istanbul
- 2. Izmir
- 3. Kutahya

Please enter the branch you want to delete:

2

```
1. Add new branch
2. Remove a branch
3. Supply products
4. Add Employee
5. Exit
Choice:
1. Istanbul
2. Kutahya
Please choose a branch:
1. Chairs
2. Desks
3. Tables
4. Bookcases
5. Cabinets
6. Exit
Choice:
```

Welcome to our Furniture Shop! 1. Login 2. Register 3. Exit Choice: 2 Please enter your name: Please enter your surname: Please enter your e-mail: Please enter your password: 1. Search products 2. Buy products 3. Exit Choice:

Search products
 Buy products
 Exit
 Choice:

 Istanbul
 Izmir
 Chairs
 Desks
 Tables
 Bookcases
 Cabinets
 Exit
 Choice:

Choice:

- 1. Chairs
- 2. Desks
- 3. Tables
- 4. Bookcases
- 5. Cabinets
- 6. Exit

Choice:

1

- 1. Model 1
- 2. Model 2
- 3. Model 3
- 4. Model 4
- 5. Model 5
- 0. Back

```
    Add new branch
    Remove a branch
    Supply products
    Add Employee
    Exit
    Choice:
    Please enter where you want to open a new branch:
    Welcome to our Furniture Shop!
    Login
    Register
    Exit
    Choice: |
```

```
Please enter your ID:

asd

Please enter your password:

dfg

Invalid id/password. Please try again.
```