

Gebze Technical University

Computer Engineering

CSE222-2021-SPRING

Homework-1 Report

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1)INTRODUCTION

1.1)Problem Definition

In this assignment, sales transactions of a company selling furnitures are carried out online and at the branch. There are 3 different users in the system. These users can perform different operations. Managers make necessary corrections on branch and branch employees and products.

After customers register to the system, they can see their product purchases and their previous purchases.

1.2- System Requirements

From the definition of the problem, it is clear that the solution of this problem requires a branch, the branch employee of that branch, the customer and the furniture management system users. When all these components are combined, it creates a furniture company management system.

1.2.1-Users of the System

The three types of users, branch employees, customers, and managers are the people who will log into the furniture management system and take actions.

They need an identity system that can distinguish users from each other and does not allow other people to log in as other users.

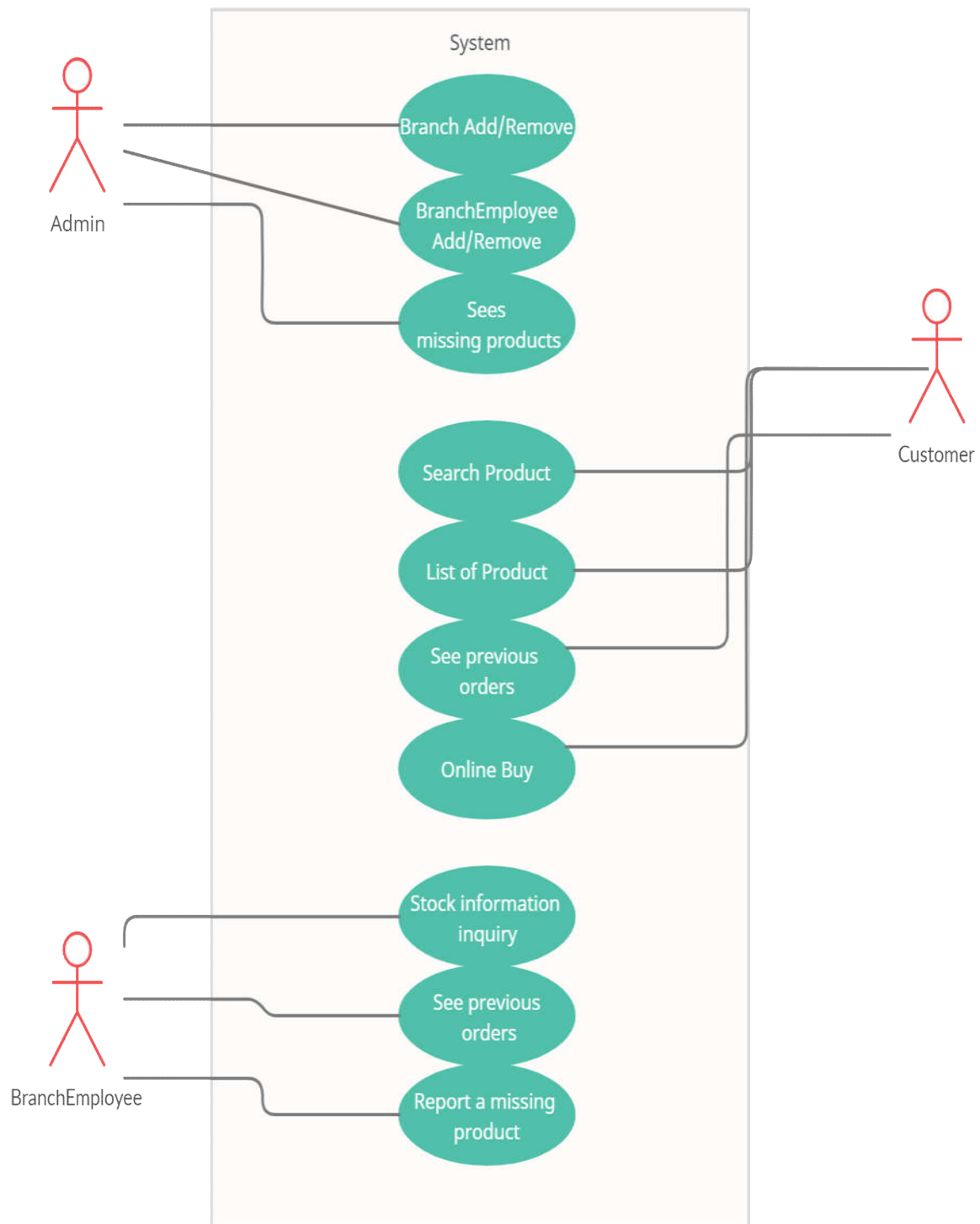
1.2.2 “Sistem class” of System

Since the whole system is based on branch, branch employee, admin and customer, the system needs a data structure that can represent a branch to the system in a useful form. From that, one can see that the system does not need to know the properties of the “sistem class”. When these all properties are gathered together as a data type, the system can utilize this data type to keep the necessary information about these “sistem class”.

2) Class Diagram

The photo was too big, I couldn't fit it here
inside the zip file

3) Use-Case Diagram



4) Problem Solution Approach

The system must have an administrator first. After the administrator has registered, the system will want to open the branch. After the branch is opened, the system asks the employee to register with the system. If the customer comes to the branch to buy products, the branch employee registers the customer in the system. Finally, the customer buys the product.

5)Test Case

a) The administrator has registered in the system

```
Admin admin=new Admin( name: "Ferdı", surname: "Sönmez", email: "ferdi.17810@gmail.com", sifre: "1610");  
newsistem.AdminAdd(admin);
```

b) The customer has registered in the system

```
Customer customer1=new Customer( name: "Osman", surname: "Kanat", email: "OsmanKanat@gmail.com", sifre: "2021", customerid: 1);  
newsistem.CustomerAdd(customer1);
```

c) New branches opened in system

```
Branch branch1=new Branch( branchname: "Branch1");
Branch branch2=new Branch( branchname: "Branch2");
Branch branch3=new Branch( branchname: "Branch3");
Branch branch4=new Branch( branchname: "Branch4");
```

d) Opened branches were saved to the system by the administrator.

```
admin.BranchAdd(branch1,newsistem);
admin.BranchAdd(branch2,newsistem);
admin.BranchAdd(branch2,newsistem);
admin.BranchAdd(branch3,newsistem);
admin.ShowAllBranch(newsistem);
```

e) New furniture made for the system

```
furniture furniture1=new furniture( name: "Office Chair", model: "Officechairmodel1", color: "Blue",branch1);
furniture furniture2=new furniture( name: "Office Desk", model: "Officedeskmodel2", color: "Red",branch2);
furniture furniture3=new furniture( name: "Bookcase", model: "Bookcasemodel2", color: "Blue",branch3);
furniture furniture4=new furniture( name: "Office Cabinet", model: "Officecabinetmodel1", color: "Pink",branch4);
furniture furniture5=new furniture( name: "Meeting Table", model: "Meetingtablemodel1", color: "Blue",branch4);
furniture furniture6=new furniture( name: "Office Cabinet", model: "Officecabinetmodel1", color: "Pink",branch4);
```

f) New furniture has been added to the system by the administrator.

```
admin.furnitureAdd(furniture1,newsistem);
admin.furnitureAdd(furniture2,newsistem);
admin.furnitureAdd(furniture3,newsistem);
admin.furnitureAdd(furniture4,newsistem);
admin.furnitureAdd(furniture5,newsistem);
admin.furnitureAdd(furniture6,newsistem);
```


g) Branch employees are registered in the system by the administrator.

```
BranchEmployee branchEmployee1=new BranchEmployee( name: "Ali", surname: "Kanat", email: "Ali@gmail.com", sifre: "1810",branch1);
BranchEmployee branchEmployee2=new BranchEmployee( name: "Veli", surname: "Çömez", email: "Velicomez@gmail.com", sifre: "1910",branch2);
BranchEmployee branchEmployee3=new BranchEmployee( name: "Ünal", surname: "Belikarık", email: "unal@hotmail.com", sifre: "2010",branch1);

admin.BranchEmployeeAdd(branchEmployee1,newsistem,branch1);
admin.BranchEmployeeAdd(branchEmployee2,newsistem,branch2);
admin.BranchEmployeeAdd(branchEmployee3,newsistem,branch1);
```

h) The customer can see all products in the system up to their branches and models.

```
customer1.ShowürünList(newsistem);|
```

```
Product-Name:Office Chair Model:Officechairmodel1 Color:Blue in Branch1
Product-Name:Office Desk Model:Officedeskmodel2 Color:Red in Branch2
Product-Name:Bookcase Model:Bookcasemodel2 Color:Blue in Branch3
Product-Name:Office Cabinet Model:Officecabinetmodel1 Color:Pink in Branch4
Product-Name:Meeting Table Model:Meetingtablemodel1 Color:Blue in Branch4
Product-Name:Office Cabinet Model:Officecabinetmodel1 Color:Pink in Branch4
```

```
Process finished with exit code 0
```