

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

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## 1. SYSTEM REQUIREMENTS

### 1. Software Specification

Operating System : macOS Catalina, Windows 10

Front End : Eclipse, Sublime Text

Rear End : Oracle SQL

Design Tool : UML

### 2. Hardware Specification

Processor : x86 processor

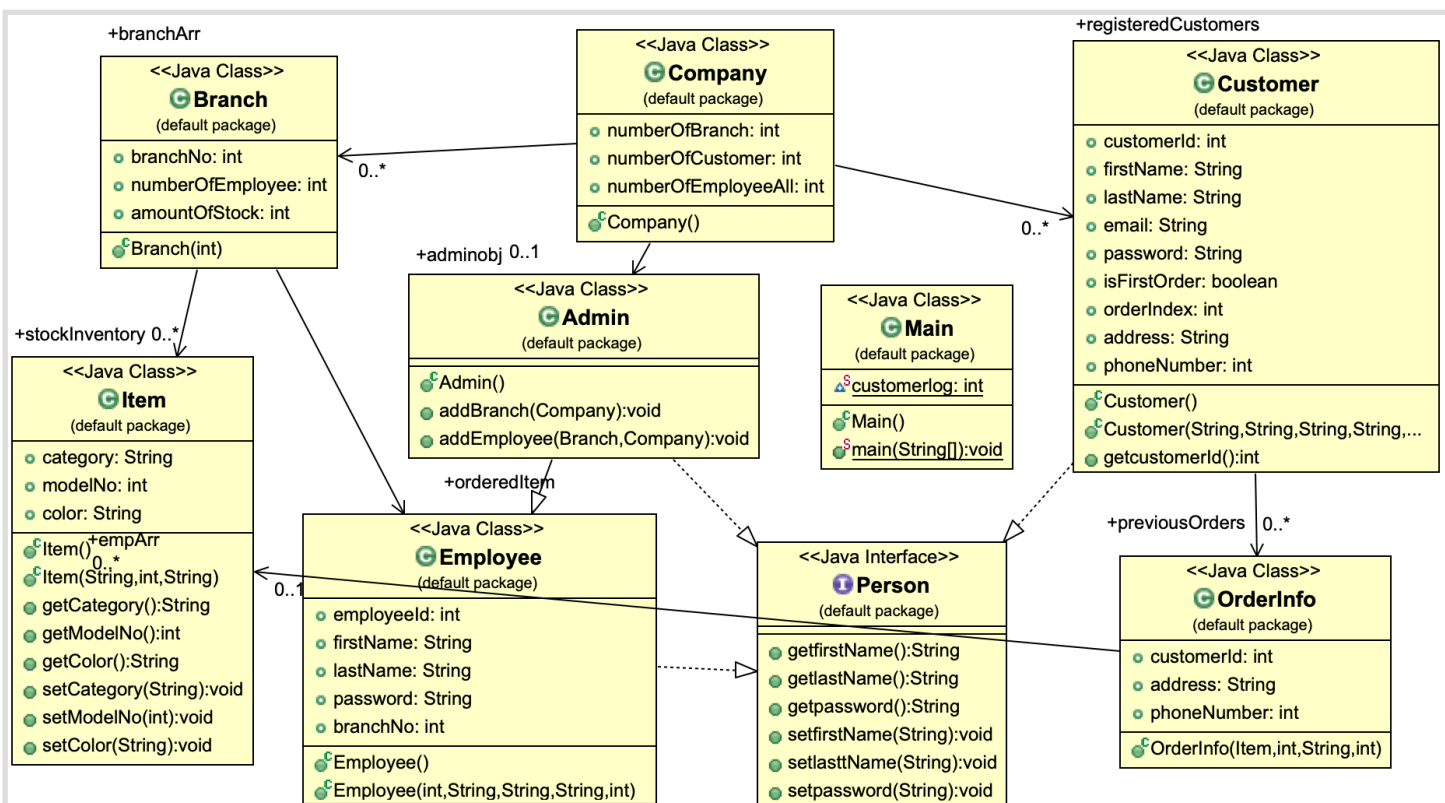
RAM : 512 MB or greater

Hard Disk : 20 GB or greater

### 3. User Characteristics

Every user; should have basic knowledge of English and must carry a login ID and password for using system.

## 2. CLASS DIAGRAM



### 3. PROBLEM SOLUTION APPROACH

The problem to be solved in this homework was to develop a furniture company automation system. Before I started developing the system, I looked at examples from the Internet. This research helped me at what kind of design I could do. This research was also important for understanding how data is stored in such automation systems.

After all this, I set up the design I will do and started to work. First, I developed the system on paper. I created the template of the system on paper. I determine the required classes and methods in this template. After determining the connections between the classes and the functions of the methods, I started writing the code.

The basic logic of my design is similar to the linked list structure. I designed a system where subclasses are stored in arrays within the parent classes to which they are related. In this way, linked progress logic makes it easier for system users and developers to access data.

While writing the source code, I used the logic of progress from the top class to the subclasses. I used the concepts of inheritance and polymorphism in classes that should be relevant. While coding this assignment, I also greatly benefited from the object oriented programming philosophy.

### 4. TEST CASES

#### Furniture Automation Login System Test Case

Test Case No	Test Scenario	Test Steps	Test Data	Expected Results	Actual Results	Pass/Fail
1	Check Employee Login with valid Data	1-Run program 2- Enter ID 3-Enter password	ID=100 password =milano	User should login	As expected	pass
2	Check Employee Login with invalid Data	1-Run program 2- Enter ID 3-Enter password	ID=999 password =torino	User should not login	As expected	pass

## 5. RUNNING AND RESULTS

```
-----THE FURNITURE COMPANY AUTOMATION SYSTEM-----  
  
1.Login to Admin Management System  
2.Login to Employee Operation System  
3.Login to Customer Interface  
4.Exit  
Please choose one:  
1
```

```
Please choose one:  
1  
ADMINISTRATOR MANAGEMENT SYSTEM  
  
(Admin ID: 111)  
(Admin password: admin)  
Login system:  
ID: 111  
  
password: admin  
  
Logged in as admin.  
  
OPERATIONS:  
1.Add Branch  
2.Add Employee  
3.Print List of Branches  
4.Print List of Employees  
5.See Stocks  
6.Logout system  
Please choose one:  
3
```

```
5.See Stocks  
6.Logout system  
Please choose one:  
2  
List of Branches  
  
1.Branch 1  
2.Branch 2  
3.Branch 3  
Select branch to add employee:  
1  
Enter ID of Employee:(only numbers)  
123  
Enter firstname of Employee:  
mete  
Enter lastname of Employee  
varol  
Enter password of Employee  
samsun
```

```
3.Print List of Branches  
4.Print List of Employees  
5.See Stocks  
6.Logout system  
Please choose one:  
4  
  
Branch 1  
  
ID      Name      Password  
1.100   Flipppo Inzaghi milano  
2.200   Gennaro Gattuso milano  
3.123   mete varol   samsun  
  
Branch 2  
  
ID      Name      Password  
1.300   Kaka Leite   milano  
2.400   Andrea Pirlo milano
```

```
2.Print Customers List  
3.Add Item  
4.Remove Item  
5.Add Customer to system  
6.Make Sale  
7.Logout system  
Please choose one:  
3  
  
List of Branches:  
1.Branch 1  
2.Branch 2  
3.Branch 3  
Choose the branch you want to add Item:  
1  
Enter Category of Item:  
Item  
Enter Model No of Item:(only numbers)  
111  
Enter Color of Item:  
Dark Blue  
Item added successfully.
```

```
Inventory List of Branch 1  
  
Category      Model No      Color  
1.Office Desk      1      Black  
2.Office Desk      2      Brown  
3.Office Chair      1      Yellow  
4.Office Chair      2      Blue  
5.Bookcase          1      Yellow  
6.Bookcase          2      Black  
7.Office Table      5      Orange  
8.Office Table      2      Purple  
9.Office Table      5      Orange  
10.Office Table     2      Purple  
11.Office Table     3      Red  
12.Cabinets         2      Brown  
13.Cabinets         1      Pink  
14.Item            111      Dark Blue
```

Category	Model No	Color
1.Office Desk	1	Black
2.Office Desk	2	Brown
3.Office Chair	1	Yellow
4.Office Chair	2	Blue
5.Bookcase	1	Yellow
6.Bookcase	2	Black
7.Office Table	5	Orange
8.Office Table	2	Purple
9.Office Table	5	Orange
10.Office Table	2	Purple
11.Office Table	3	Red
12.Cabinets	2	Brown
13.Cabinets	1	Pink
14.Item	111	Dark Blue

Amount of stock : 14      **Remove Item**

Choose the Item number you want to remove:  
13

Inventory List of Branch 1		
Category	Model No	Color
1.Office Desk	1	Black
2.Office Desk	2	Brown
3.Office Chair	1	Yellow
4.Office Chair	2	Blue
5.Bookcase	1	Yellow
6.Bookcase	2	Black
7.Office Table	5	Orange
8.Office Table	2	Purple
9.Office Table	5	Orange
10.Office Table	2	Purple
11.Office Table	3	Red
12.Cabinets	2	Brown
13.Item	111	Dark Blue

Amount of stock : 13

4.Office Chair	2	Blue
5.Bookcase	1	Yellow
6.Bookcase	2	Black
7.Office Table	5	Orange
8.Office Table	2	Purple
9.Office Table	5	Orange
10.Office Table	2	Purple
11.Office Table	3	Red
12.Cabinets	2	Brown
13.Item	111	Dark Blue

Amount of stock : 13

**Online Shopping**

Choose the Item to purchase online:  
6

Enter delivery address:  
atakum samsun

Enter Phone Number:(only numbers)  
123123

Item purchased successfully:

OPERATIONS:

- 1.Print List of Products
- 2.Shop Online
- 3.See Previous Orders
- 4.Logout system

Please choose one:  
3

**Previous Order**

Previous Orders:

Category	Model No	Color	Delivery Address	Phone Number
1.Bookcase	2	Black	atakum samsun	123123