

Gebze Technical University
Computer Engineering

CSE 222/505 – Spring 2021

Homework 1 Report

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1.SYSTEM REQUIREMENTS

First of all, a **company** must be created. You have to determine company name and initial branch number.

```
Company(String name,int branchNo);
```

Then, there must be an **admin**. You can create an admin by two ways. First one is simple one, just call it and it will ask for necessary information to you .

```
Admin()
```

Second one is more advanced. You have to determine admins name, surname, mail address, and password.

```
Admin(String name,String surname,String mail,String password)
```

You need to give the company to admin.

```
admin.setCompany(company);
```

Now you need at least one employee and customer for the system to work.

To create employee:

```
Employee()
```

 This one asks for necessary information to you .

```
Employee(String name, String surname,String mail,String passw)
```

But this one take all necessary information from you.

To create customer:

```
Customer()
```

 This one asks for necessary information to you .

```
Customer(String name,String surname)
```

 This one only needs the name and surname of employee then asks for mail and password.

```
Customer(String name, String surname,String mail,String passw)
```

But this one take all necessary information from you.

Finally, you need to add these people to your company.

```
admin.addWorker(worker1);
```

```
admin.getCompany().addCustomer(customer1);
```

Admin and Company can add both employee and customer.

These are the basic requirements to start system.

To log in the system, you must have an account. **To create an account:**

`Account()` This one asks for necessary information to you .

`Account(String mail,String password)`

This one needs mail address and password to create an account.

But you do not need to use these account functions. When creating employee and customer, the system asks for account information automatically.

If you log into the system as admin,
you can add/remove employees, add/remove branches,see requests from employees and accept those requests.

`loginAdmin(admin);`

`admin.addWorker(new Employee());`

`admin.removeWorker();`

`admin.addBranch();`

`admin.removeBranch();`

`admin.seeRequests();`

`admin.acceptRequests();`

All the necessary information such as employee name, id will be asked in the functions.

If you log into the system as an employee,
you can see stocks,sell furniture to customer,request furniture from admin,get customer information like their previous orders, add new customer to system. The employee does these through the company.

`loginEmployee(admin.getCompany());`

`: company.seeFurnitures();`

`company.sellFurniture();`

`company.makeRequests();`

`company.customerInformation();`

`: company.addCustomer(new Customer());`

All the necessary information such as customer id, furniture type will be asked in the functions.

If you log into the system as customer,
you can see products that in the stocks , search furniture ,order furniture and see previous orders.

`:loginCustomer(admin.getCompany());`

`company.seeFurnitures();`

`company.searchFurniture();`

`company.orderFurnitures(customer);`

`customer.showOrders();`

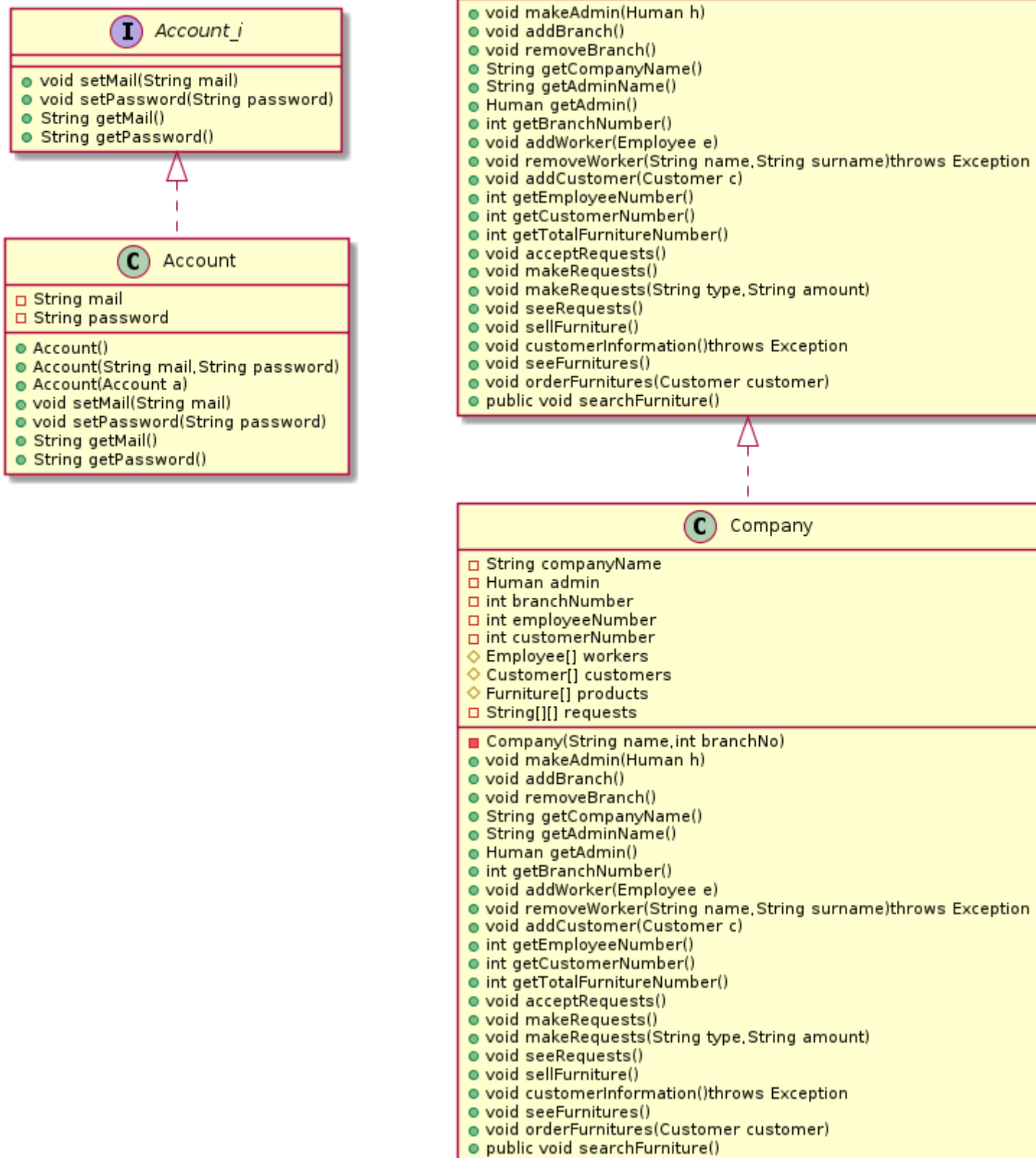
All the necessary information such as furniture type ,model color and keyword for product search will be asked in the functions.

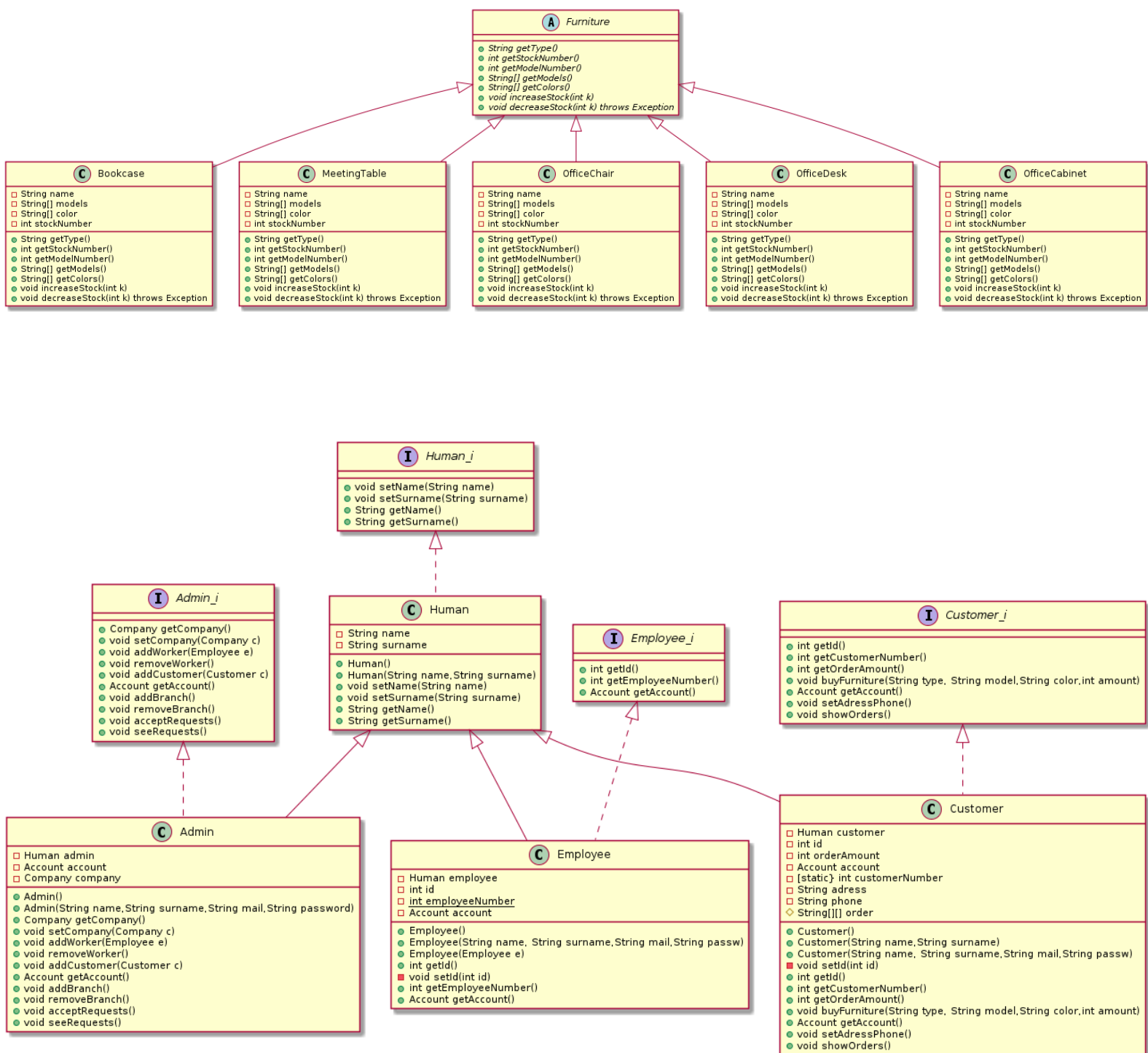
If you do not have account to enter system, you can create new customer account.

```
newCustomer(admin.getCompany());
```

Then,you can log into the system as a customer.

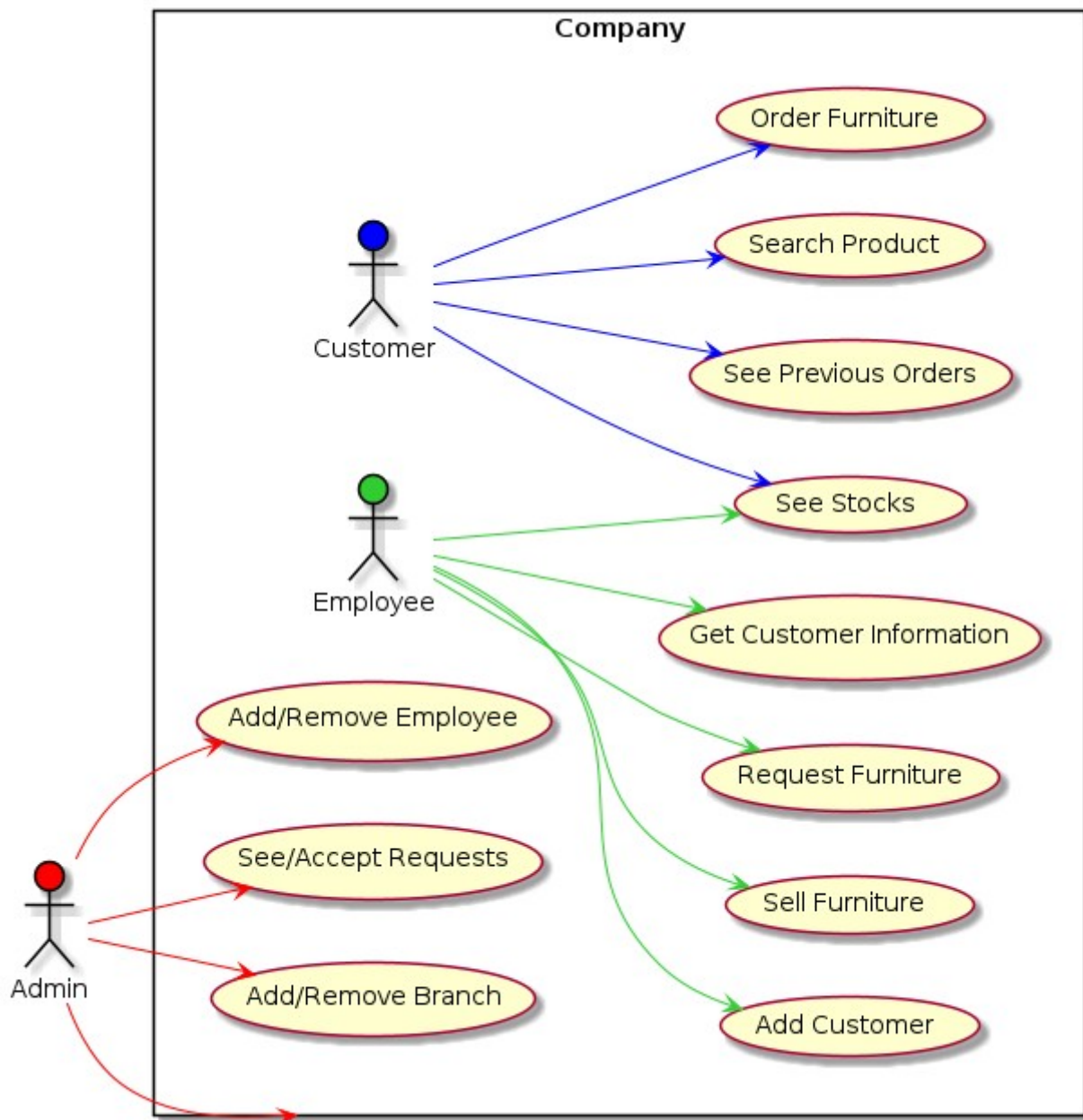
2.1 Class Diagrams





*These diagrams will be in the folder

2.2 Use-Case Diagram



3. PROBLEM SOLUTION APPROACH

To solve problem , I created **Company Class** ,and added all the **employees**, **customers** and **furnitures** as variable,then added this **Company Class** in **Admin Class** as variable.

4. Test Cases – Running Commands and Results

```
Company company= new Company("Gtu",4);
```

```
Admin admin=new Admin("Baran","Solmaz","admin","admin");
```

```
admin.setCompany(company);
```

```
Employee worker1=new Employee("worker1","worker1","mail1","password1");  
admin.addWorker(worker1);
```

```
Customer customer1=new Customer("customer1","customer1","mail1","password1");  
admin.getCompany().addCustomer(customer1);
```

To Log into the system as Admin ;

```
Mail: admin  
Password: admin  
  
Welcome!
```

To remove employee;

```
Employee Name: employee  
Employee Surname: employee  
  
Employee Removed!
```

```
Employee Name: employee  
Employee Surname: employee  
No Matched Employee!
```

To see requests;

```
Requests:  
Bookcase          Amount: 100
```

To Log into the system as Employee ;

```
Mail: mail1  
Password: password1  
  
Welcome!
```

To add employee;

```
Name: employee  
Surname:employee  
E-mail Address: mailAddress  
Password: mailPassword  
  
Employee Added!
```

To add branch;

```
Branch Added!
```

To remove branch;

```
Branch Removed!
```

To accept requests;

```
Requests Accepted!
```

Bookcase	Model No: 12	Stock: 12
Bookcase	Model No: 12	Stock: 112

To see stocks;

Office Chair	Model No: 7	Stock: 10
Office Desk	Model No: 5	Stock: 8
Meeting Table	Model No: 10	Stock: 15
Bookcase	Model No: 12	Stock: 12
Office Cabinet	Model No: 12	Stock: 12

To sell furniture;

```
Type: Office Desk
model1, model2, model3, model4, model5,
Model: model3
color1, color2, color3, color4,
Color: color4
Total Amount: 8
5
Customer Id:
1
-Order Completed-
-Furniture Sent-
```

```
Type: Office Desk
model1, model2, model3, model4, model5,
Model: model2
color1, color2, color3, color4,
Color: color1
Total Amount: 8
5
Customer Id:
98
Customer Does Not Exist!
```

To get information of customer;

```
Customer Id:
1
Customer Name: customer1      Surname: customer1
Previous Orders:
Office Desk      model3      color4      5
```

```
Customer Id:
99
Customer Id Couldn't Found!
```

To request furniture;

```
Requested Type: Office Desk
Requested Amount: 100
Requested From Admin!
```

```
Requests:
Bookcase      Amount: 100
Office Desk   Amount: 100
```

To add new customer;

```
Name: new customer
Surname: new customer
E-mail Address: new
Password: new
Your Id: 2
Customer Added!
```

To log into the system as Customer;

```
Mail: mail1
Password: password1
Welcome!
```

To see stocks;

```
Office Chair   Model No: 7   Stock: 10
Office Desk    Model No: 5   Stock: 8
Meeting Table  Model No: 10  Stock: 15
Bookcase       Model No: 12  Stock: 12
Office Cabinet Model No: 12  Stock: 12
```


To search product;

Keyword For Search:

Office

Search Results:

Office Chair	Model No: 7	Color No: 5	Stock Amount: 10
Office Desk	Model No: 5	Color No: 4	Stock Amount: 8
Office Cabinet	Model No: 12	Color No: 1	Stock Amount: 12

To order furniture;

Furniture Type: Office Desk
model1, model2, model3, model4, model5,

Furniture Model: model5

color1, color2, color3, color4,

Furniture Color: color1

Total Furniture Amount: 8

5

Adress: address

Phone: phone

-Order Completed-

Furniture Type: Office Desk
model1, model2, model3, model4, model5,

Furniture Model: model2

color1, color2, color3, color4,

Furniture Color: color3

Total Furniture Amount: 3

10

Adress: adress

Phone: phone

Not Enough Stock!!

Company Informed!

To see previous orders;

Previous Orders:

Office Desk	model5	color1	5
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