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

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1. **SYSTEM REQUIREMENTS**

   Functional Requirements:

   ADMİN:

   1) **Admin can add a new branch**
   2) **Admin can remove branch**
   3) **Admin can add employee to branchs**
   4) **Admin can remove employee to branchs**

   COSTUMER:

   1) **Costumer can view the products and features in the store**
   2) **Costumer can search for the desired product in the store**
   3) **Costumer can shop online**
   4) **Costumer can login system**
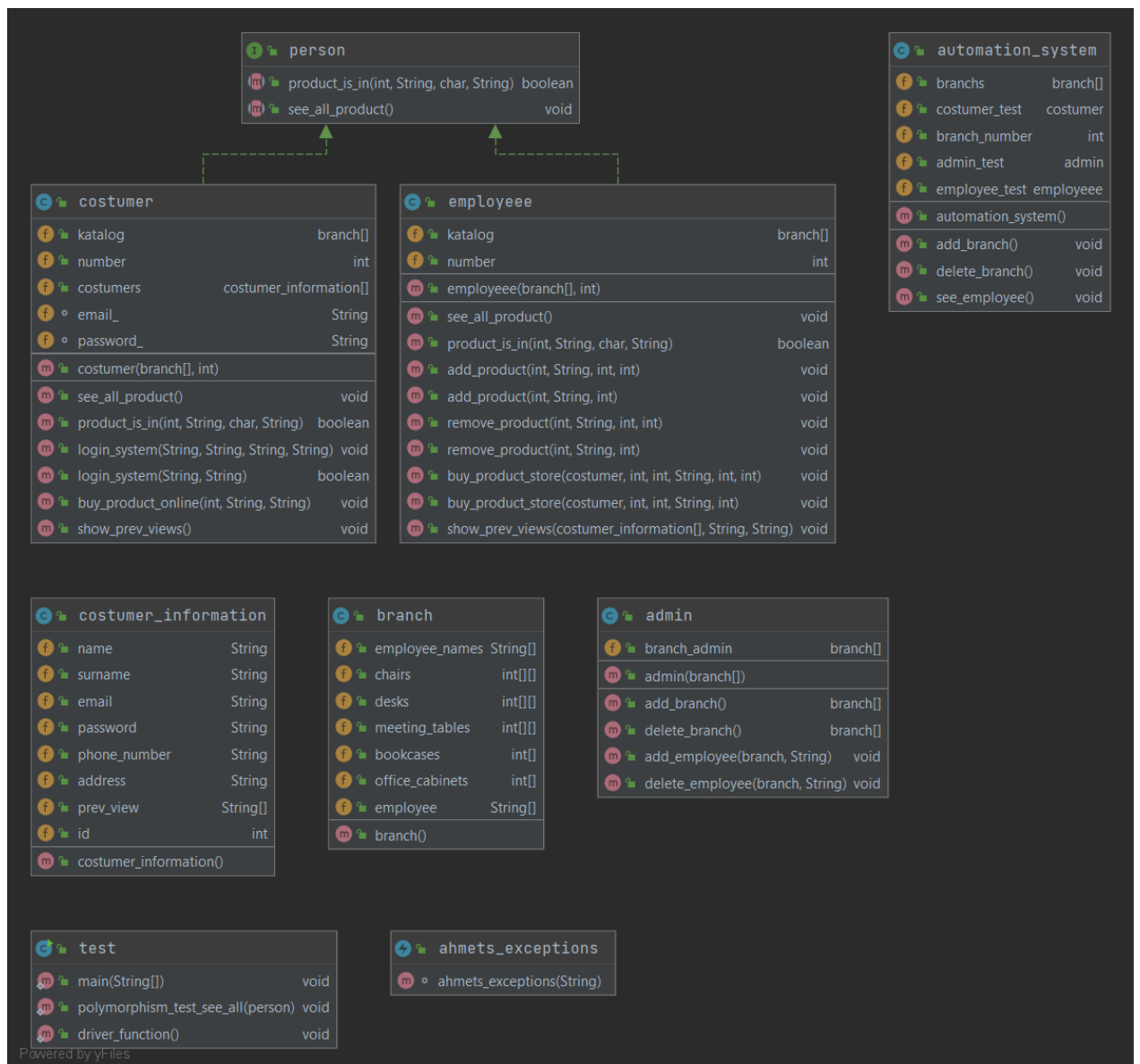   5) **Costumer can Register**

   EMPLOYEE:

   1) **Employee can add a product**
   2) **Employee can remove product**
   3) **Employee can show products in stock**
   4) **Employee can add members**
   5) **Employee can view previous order information**
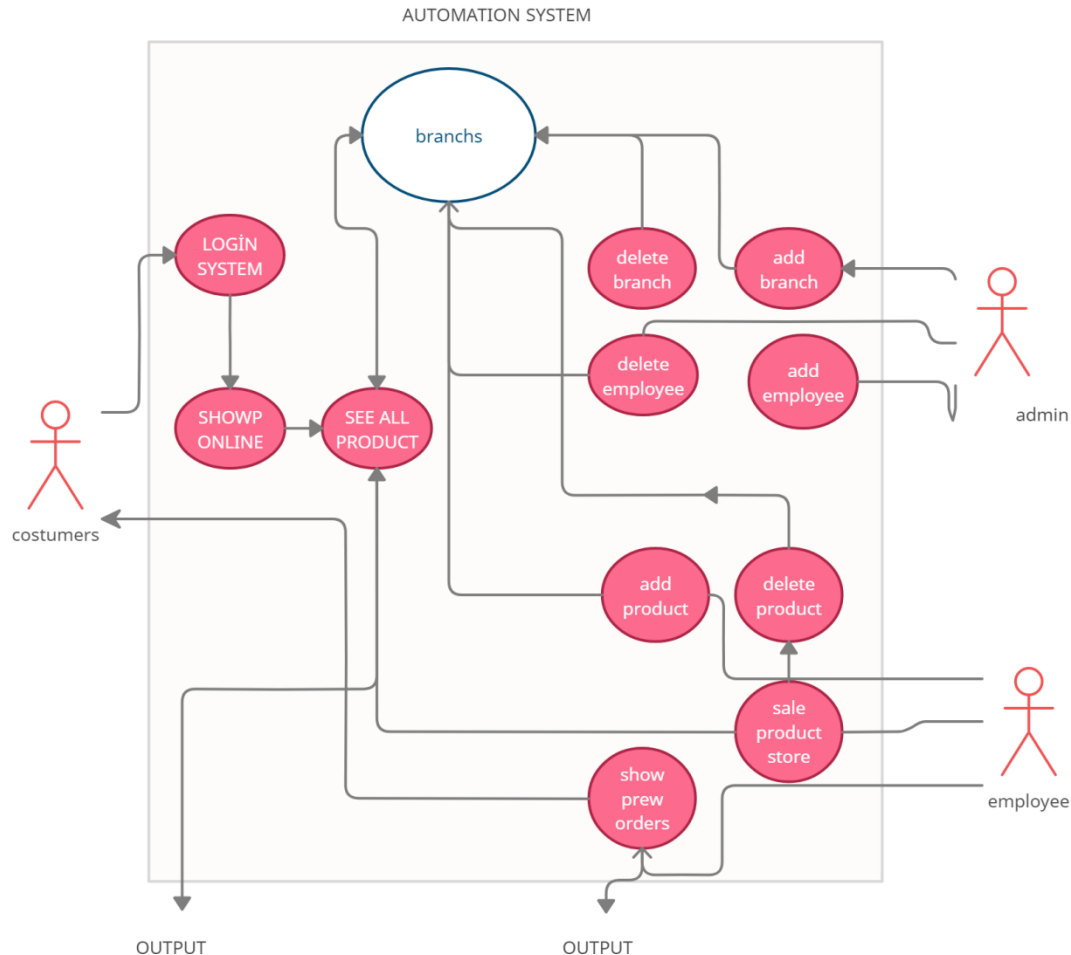
   Non-Functional Requirements:

   1) **Computer must have jdk**
   2) **The program should be maintainable**
   3) **System requirements test should be done before the program is running**

2. **CLASS-UML-DIAGRAM**

USE CASE DIAGRAM

AUTOMATION SYSTEM

3. **PROBLEM SOLUTION APPROACH**

I choose java language for problem solving.I think the problem with this assignment is that the classes in the system can be aware of each other and keep themselves up-to-date.I created a class under the name of automation system admin,costumer,employee and branches .For the required arrays,I sometimes used classes as structures,for example costumer information consists of information in the class and these class and these classes are kept in an array .I inherited the employee and the costumer to the person; admin independent of these two .I have defined admin,employee,costumer and branches as inner class in the automation class. In this way,they could be aware of each other,the processes in these 3 classes can update each other and the changes in the branches can stay up-to-date.In this way,the system becomes interactive.

4. TEST CASES RUNNING AND RESULTS

ADMIN:

In this section the branch is deleted

```
BRANCH DELETED TEST FOUR BRACH!
BEFORE BRANCH NUMBER=4
BRANCH DELETED
BRANCH DELETED
BRANCH DELETED
BRANCH DELETED
ADMIN DELETE BRANCH. NEW BRANCH NUMBER=0
```

If there is no branch in the system

```
NEW BRANCH NUMBER=0
ADMIN DELETE BRANCH EXCEPTION TEST
ahmets_exceptions: There is no branch!
```

In this section the branch is added

```
BRANCH ADDED TEST FOUR BRACH!
BRANCH ADDED
BRANCH ADDED
BRANCH ADDED
BRANCH ADDED
NEW BRANCH NUMBER=4
```

In this section,the worker is addedd to the desired branch.

```
 ***ADD EMPLOYEE AND DELETE EMPLOYE TEST***
BEFORE EMPLOYEE NAMES
***BRANCH1***
ahmet
***BRANCH2***
ahmet
***BRANCH3***
ahmet
***BRANCH4***
ahmet

ADMIN ADD EMPLOYEE 'BAHADIR' BRANCH 2
AFTER EMPLOYEE NAMES
***BRANCH1***
ahmet
***BRANCH2***
ahmet
bahadır
***BRANCH3***
ahmet
***BRANCH4***
ahmet
```

In this section,the worker is deleted to the desired branch.

```
ADMIN DELETE EMPLOYEE 'AHMET' BRANCH 2
AFTER EMPLOYEE NAMES
***BRANCH1***
ahmet
***BRANCH2***
bahadır
***BRANCH3***
ahmet
***BRANCH4***
ahmet
```

COSTUMER:

In this section,he tries to log in to the system,but cannot login because he is not registered After that He is registred.

```
LOGIN SYSTEM FIRST LOGIN
PLEASE REGISTER
IN THIS SECTION IS TRYING TO LOGIN WITH MAIL AND PASSWORD BUT FAILS
THERE IS NO SUCH MEMBER
NAME=ahmet
SURNAME=okur
EMAIL=ahmetokur_41@hotmail.com
PASSWORD=asdasdasd
REGISTERED
```

In this part the costumer is shopping online

```
COSTUMER BUY PRODUCT !!121st product!!

ADRESS=gebze teknik üni. bilgisayar müh. PHONE_NUMBER=02121312!!

SEE ALL PRODUCT
```

Number of product before purchase

```
121) C model bookcases=2
```

Number of product after purchase

```
121) C model bookcases=1
```

Costumer's previous shopping information

```
test.costumer_test.buy_product_online(121,"gebze teknik üni. bilgisayar müh.","02121312");//bookcase
test.costumer_test.buy_product_online(55,"gebze teknik üni. bilgisayar müh.","02121312");//chair
```

```
CUSTOMER VIEWS PREVIOUS ORDERS
bookcase
chair
```

Costumer's product is in function

```java
if(test.costumer_test.product_is_in(0,"desks",'A',"blue")==true){
    System.out.println("YES PRODUCT IS IN");
}
```

```
PRODUCT IS IN CONTROL
YES PRODUCT IS IN
```

Employee:

Employee add and remove product funtion

```
ADD AND REMOVE PRODUCT LİNE 64 and 60 BEFORE
```

Before;

```
60) A model red color desks=2
61) A model yellow color desks=2
62) A model green color desks=2
63) B model blue color desks=2
64) B model red color desks=2
```

After;

```
60) A model red color desks=1
61) A model yellow color desks=2
62) A model green color desks=2
63) B model blue color desks=2
64) B model red color desks=3
```

Employee sell product store

```
SHOPPING FROM THE STORE LINE 13
```

Before;

```
12) A model office_cabinets=2
13) B model office_cabinets=2
14) C model office_cabinets=2
15) D model office_cabinets=2
16) E model office_cabinets=2
17) F model office_cabinets=2
18) G model office_cabinets=2
19) H model office_cabinets=2
20) I model office_cabinets=2
21) J model office_cabinets=2
22) K model office_cabinets=2
23) L model office_cabinets=2
```

After;

```
12) A model office_cabinets=2
13) B model office_cabinets=1
14) C model office_cabinets=2
15) D model office_cabinets=2
16) E model office_cabinets=2
17) F model office_cabinets=2
18) G model office_cabinets=2
19) H model office_cabinets=2
20) I model office_cabinets=2
21) J model office_cabinets=2
22) K model office_cabinets=2
23) L model office_cabinets=2
```

Employee looks at previous information of requested costumer

```
CUSTOMER VIEWS PREVIOUS ORDERS
bookcase
chair
office_cabinets
```

Employee checks the product in stock

```
COSTUMER IS IN FUNCTION CONTROL A MODEL DESKS BLUE 1. BRANCH
YES PRODUCT IS IN
```