

Gebze Technical University

Computer Engineering

CSE222-2020-SPRING

Homework-1_part2 Report

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1)INTRODUCTION

1.1)Problem Definition

In this homework ,the problem is to build a working cargo management system has four of users. Them is branch employee,transportation personnel customer type and the other is administrator type user. Each of these user types has certain capabilities. Naturally, a cargo company has packets and need to be transferred.

This packets can be accept by branch employee also this packets must registry by branch employee.

Transfer can be done by transportation personnel. if transportation personnel packets deliver ,it will write "packet delivered" in cargo company system.

1.2- System Requirements

From the problem definition, it is obvious to see that the solution to this problem requires a branch , the branch employee of that branch and the users of the cargo management system. All these components make a cargo company management system when combined.

1.2.1-Users of the System

The four types of users, branch employee, transportation personnel ,customer and administrator, are all people that is going to log-in to the cargo management system and perform actions.

They need an identification system that can separate users from each other and does not allow other people to login as other users. These requirements create a need for a menu.

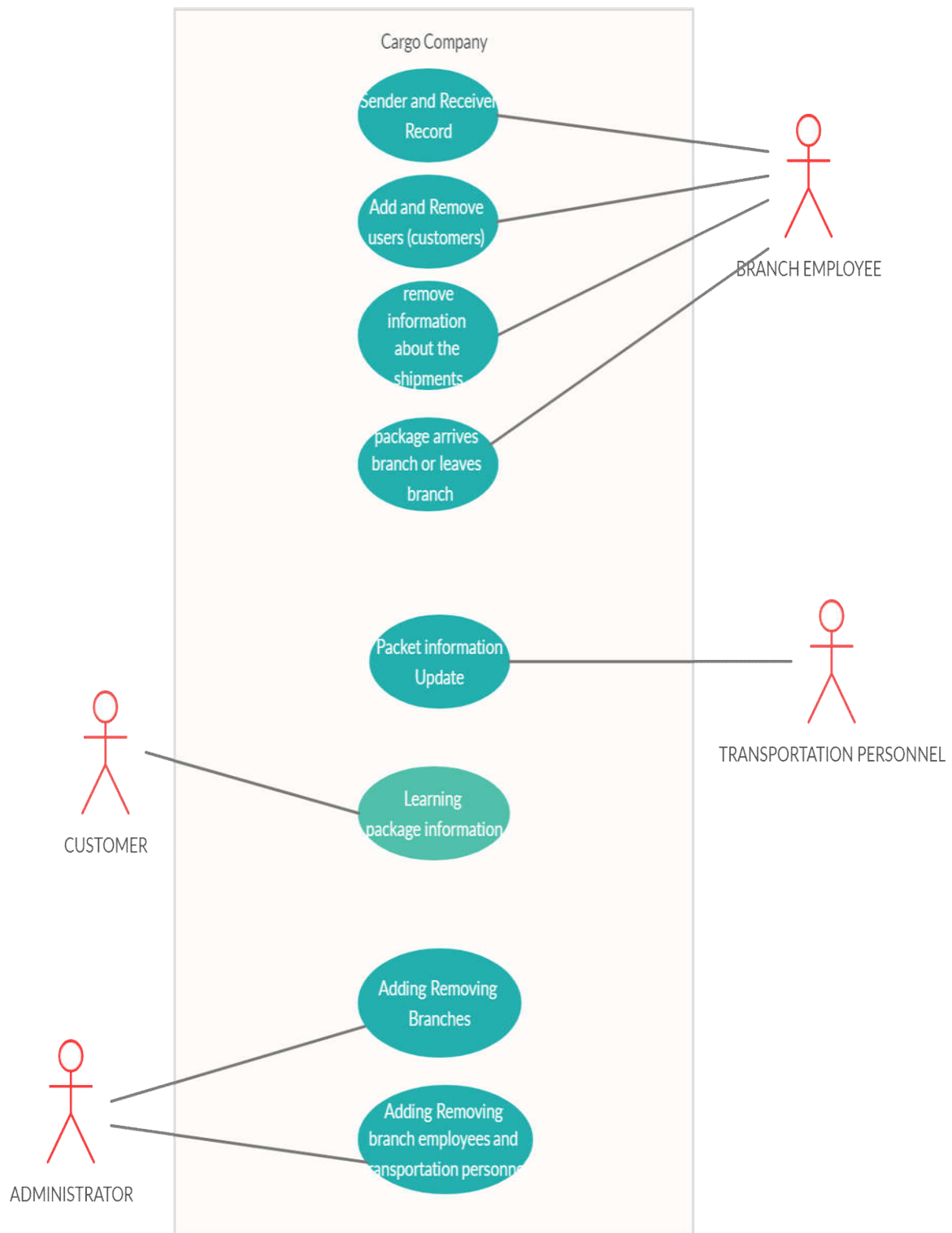
1.2.2 “Sistem class” of System

Since the whole system is based on branch, branch employee and transportation personnel, 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



3) Use Case Diagram



4) Problem Solution Approach

The system must first have one administrator. After the administrator is registered, the system will ask to open the branch. After the branch is opened, the system asks the employee to register the system. If the customer arrives to send the cargo to the branch, the branch employee registers the sender and receiver customer to the system. Finally, the transportation personnel receives the cargo and delivers.

5) Test Case

a) If the administrator enters the password incorrectly

```
Administrator Name Enter
Ferdî
Administrator SurName Enter
Sonmez
Create Administrator Password
1610
****Administrators Add****
1-Administrator Add
2-General Cargo System Go
2
*****
--Administrator Add System Exitt--
*****
*****|General--Cargo--System|*****
1-Administrator System Enter.
2-BranchEmpoyee System Enter.
3-TransportaionPersonnel Enter.
4-Customer Enter.
5-System Exit
*****
1
Enter of Administrator Password
152
Administrator Password Wrong.
```

b) If the manager does not open a branch in the system

```
System Ferdi sonmez Logged In As Administrator!!!
*****|Administrator System|*****
1-Branch Add Or Remove
2-BranchEmployee Add Or Remove
3-TransportaionPersonnel Add Or Remove
4-Administrator System Exit...

*****
2
1-BranchEmployee Add
2-BranchEmployee Remove
1
First of all, you can do Branch Employee add operations after adding a branch to the system!
*****|Administrator System|*****
```

c) If there are fewer than two customers in the system

```
*****|BranchEmployee System|*****
1-Customer Add Or Remove.
2-Accept Cargo From Customer.
3-Cargo Information Update.
4-BranchEmployee System Exit
*****
2
***Accept Cargo From Customer
There must be at least 2 customers registered in the system
```

d) If the customer enters the cargo tracking number incorrectly in customer system

```
*****|Customer System|*****
1-Packet Status With TrackingNo.
2-Customer System Exit
*****
1
Please Enter the Cargo Tracking Number:
203
Cargo Tracking Number Incorrectly Entered
.....
```


d) If the customer enters the cargo tracking number incorrectly in BranchEmployee system

```
*****|BranchEmployee System|*****
```

```
1-Customer Add Or Remove.
```

```
2-Accept Cargo From Customer.
```

```
3-Cargo Information Update.
```

```
4-BranchEmployee System Exit
```

```
*****
```

```
3
```

```
****Cargo Information Update
```

```
Enter Cargo Tracking Number
```

```
475
```

```
Cargo TakipNo Wrong Entry Try Again
```

e) If the BranchEmployee enters the password incorrectly

```
*****|General--Cargo--System|*****
```

```
1-Administrator System Enter.
```

```
2-BranchEmployee System Enter.
```

```
3-TransportaionPersonnel Enter.
```

```
4-Customer Enter.
```

```
5-System Exit
```

```
*****
```

```
2
```

```
Enter your Branch Employee Password
```

```
150
```

```
BranchEmployee Password Wrong
```

f) If the transportation personnel enters the password incorrectly

```
*****|General--Cargo--System|*****
```

```
1-Administrator System Enter.
```

```
2-BranchEmployee System Enter.
```

```
3-TransportaionPersonnel Enter.
```

```
4-Customer Enter.
```

```
5-System Exit
```

```
*****
```

```
3
```

```
TransportationPersonel Password Enter:
```

```
145
```

```
There Is No Wrong Password Or Such Transportation Personnels.
```

g) The branch was added correctly

```
*****|Administrator System|*****
```

```
1-Branch Add Or Remove
```

```
2-BranchEmployee Add Or Remove
```

```
3-TransportaionPersonnel Add Or Remove
```

```
4-Administrator System Exit...
```

```
*****
```

```
1
```

```
1-Branch Add
```

```
2-Branch Remove
```

```
1
```

```
***Branch Add***
```

```
Branch Name Enter
```

```
Gebze
```

h) The branchEmployee was added correctly

```
1-BranchEmployee Add
2-BranchEmployee Remove
1
****BranchEmployee Add****
BranchEmployee Name Enter
Ali
BranchEmployee Surname Enter
comez
Create Password for Branch Employee
1710
*****|Administrator System|*****
```

i)The Transportation Personnel was added correctly

```
1-TransportaionPersonnel Add
2-TransportaionPersonnel Remove
1
****TransportaionPersonnel Add****
TransportaionPersonnel Name Enter
ahmet
TransportaionPersonnel Surname Enter
ak
Creating a Password for TransportationPersonnel
1220
```

j) Packet is delivered by transportation personel

TransportationPersonel Password Enter:

1220

Syste ahmet ak named TransportationPersonnel Logged In

****|TransportationPersonel System|****

1-Update Cargo.

2-Transportation Personel System Exit

1

0-Nolu Cargo TakipNo->4861

Choose Which to give to Transportation Personnel.

0

4861 TakipNo Cargo burak yavuz named receiver delivered!!!

k) Cargo was accepted by branch employee

***Accept Cargo From Customer

***Customers in System**

0-yasir fidan

1-burak yavuz

Select Sender(Example= 0 1 2...)

0

1-burak yavuz

Select Receiver(Example= 0 1 2...)

1

1-Branch

2-Transportation Process

Select Status of Packet:

1

Packet TakipNo=4861

l) Cargo was updated by branch employee

***Cargo Information Update

Enter Cargo Tracking Number

4861

1-Branch

2-Transportation Process

Paket Durumunu Seciniz:

2

Current Status of the Package:Transportation Process

*****In-process*****

m) Packet was question by customer

Please Enter the Cargo Tracking Number:

4861

Receiver:burak yavuz

Sender:yasir fidan

TakipNo:4861

Current status of the package:Transportation Process