Gebze Technical University

Computer Engineering

CSE222-2020-SPRING

Homework-1 Report

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1)INTRODUCTİON

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

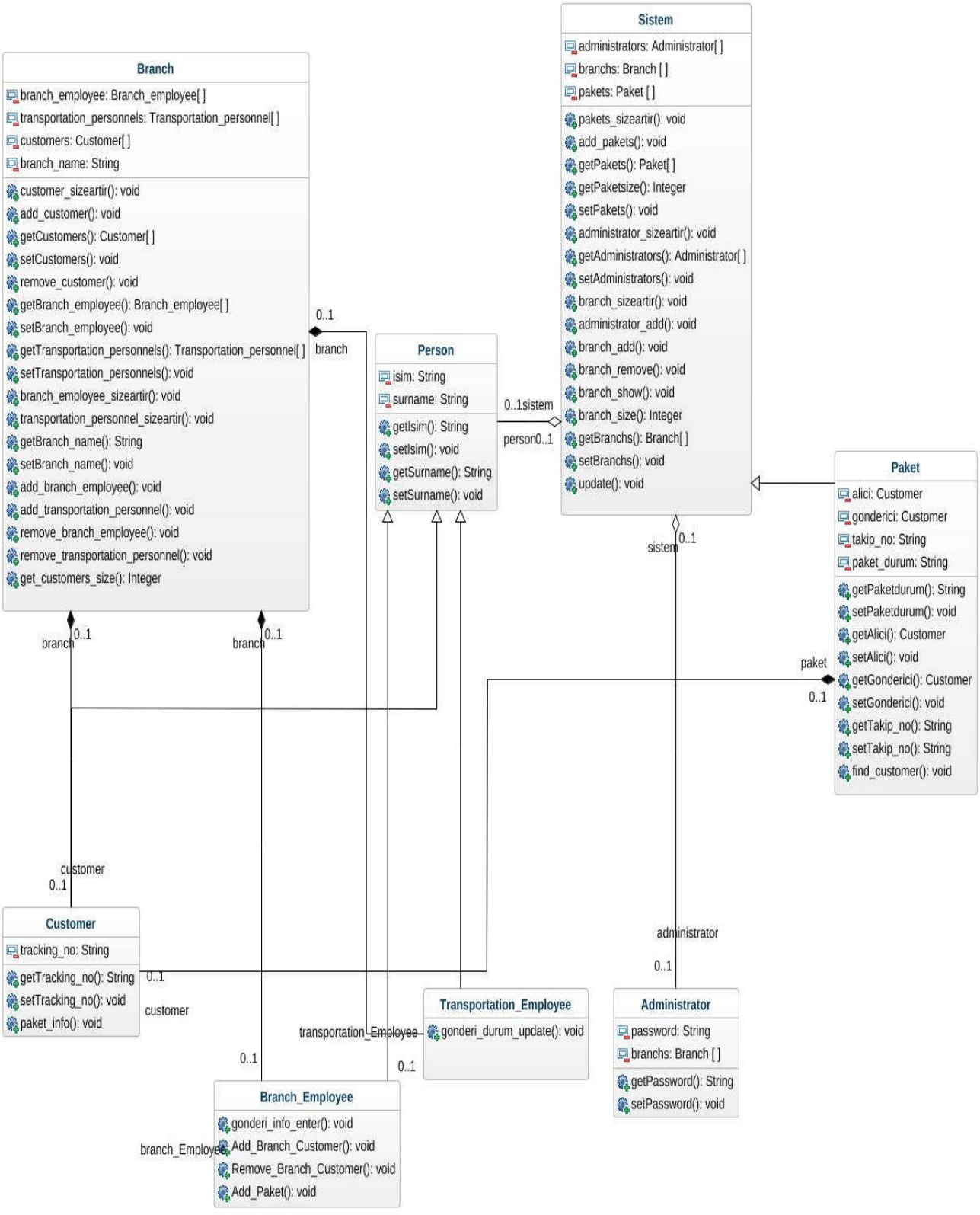
The four types of users, branch employee,transportation personnel ,customer and administrator, are all people that is going to log-in to the cargo management system and perform actions.

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.

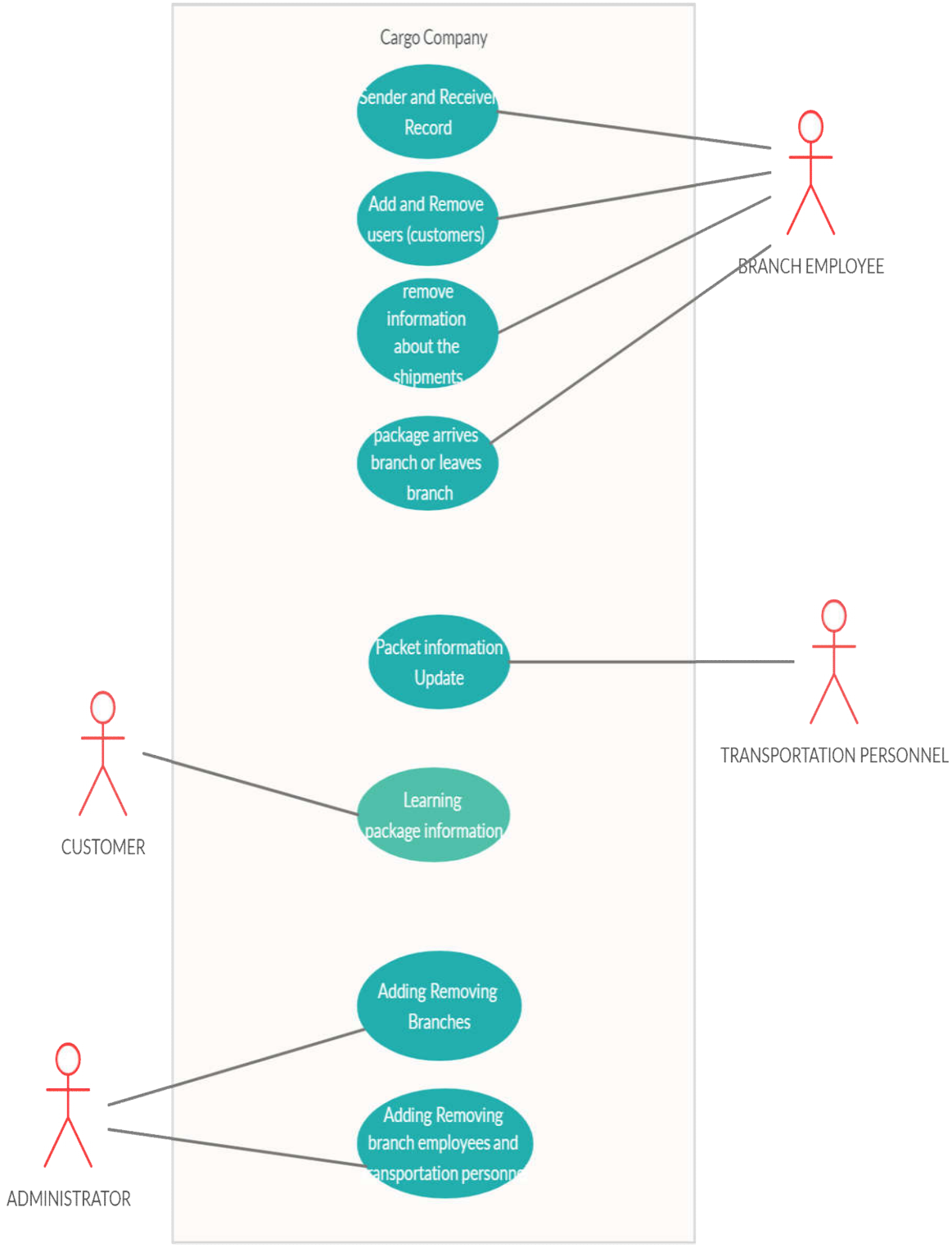
1.2.2 Branch of System

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 branch; where its doors and windows are placed etc. The system only needs to know the branch number in menu, if the branch employee or transportation personnel in and what the current refer of the branch is. 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 branch.

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 branch. 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

```
************************
Administator Olarak Sisteme Giris Yapabilmek Icin Password Girin:
152
Password Yanlis Girildi...
Sistemi Tekrar Baslatiniz...
BUILD SUCCESSFUL (total time: 29 seconds)
```

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

```
*******Branch employee ekle veya cikar*******
1-BranchEmployee Ekle
2-BranchEmploye Cikar
1
********BranchEmployee Add*********
Herhangi bir Branch olmadıgı icin once yonetici olarak Branch ekleyiniz:
Sistemi Tekrar Baslatiniz..
```

c) If there is no branch employee at the branch

```
Bu branchte Herhangi Bir BranchEmployee Calismiyor.
Lutfen Calisan ekledikten sonra Deneyiniz.
*******GENEL KARGO SISTEM***********
1-Administrator Olarak giris.
2-Branch Empoyee olarak giris.
3-Transportaion olarak giris.
4-Customer olarak giris.
5-Sistemden Cıkıs
*********************************
```

d) If there are fewer than two customers in the branch

```
Subede en az 2 musteri olmasi gerekmelidir.Lutfen musteri ekleyiniz.
*******GENEL KARGO SISTEM***********
1-Administrator Olarak giris.
2-Branch Empoyee olarak giris.
3-Transportaion olarak giris.
4-Customer olarak giris.
5-Sistemden Cıkıs
*********************************
```

e) If the customer enters the cargo tracking number incorrectly

```
Kargo Takip no Girin
2020
Kargo TakipNo Yanlis.Tekrar Girin
*******GENEL KARGO SISTEM***********
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