

LAB6

Develop Company management OOP application with following components and requirements

1. Create MVC console application in NetBean:

- a. Define class Customer with following attributes and methods:

+ CustomerID, Name, Phone, Date of Birth

+ Constructors, get/set(), toString()

Define class Company with following attributes and methods:

+ List of Customer

+ Read text file to load data for Company– customer.txt file has format as below

```
KH01,Jonh Horstman,0985405999,28/12/2000  
KH02,John Smith,0906567789,12/3/2015  
KH03,Cays Horstman,0987787676,01/09/2019  
KH04,Cays Horstman,0908778887, 05/03/2022
```

+ Add new Customer from console

+ Search Customer by different criteria(4 criterias)

+ Write data in customer1.txt file

+ Update Phone and Date of Birth.

Note: File customer.txt and customer1.txt placed in the project folder equal to the scr folder of application.

- b. Develop CompanyManagement class for application

+ Application menu for application include: Display all customers, , Add new customer, Customer Search customer , Write data to File, Delete a customer by ID, Update Phone and Date of Birth.

Hint: An abstract Menu class is provided for use in the application. Override method execute()

+ Method for searching Customer with searching menu

2. Technical requirements:

+ Create package **model** for Customer and Company class.

+ Create package **view** for Menu.

+ Create package **controller** CompanyManagement class

+ Check validate for

- ✓ CustomerID has a length of **4**, must start with "KH", the rest of the characters are numbers.
- ✓ Phone has a length of **10**, must start with "09".
- ✓ Date of Birth by Date Format "dd/MM/yyyy".

+ User interface as sample images below

Company Management System

- ```

1.List all customer
2.Search customer
3.Add new Customer
4.Customer statistical
5.Exit

```

Enter selection..1

List of Customers

```

Customer{id=1, name=Jonh Horstman, phone=0985405999}
Customer{id=2, name=John Smith, phone=0906567789}
Customer{id=3, name=Cays Horstman, phone=0987787676}
Customer{id=4, name=Cays Horstman, phone=0908778887}

```

Total : 4 customers.

**When choose search customer:**

Customer Searching

- ```
-----  
1.Find by CustomerID  
2.Find by Name  
-----
```

Enter selection..1

Enter CustomerID :2

List of Customers

```
-----  
Customer{id=2, name=John Smith, phone=0906567789}  
-----
```

Total : 1 customers.

Customer Searching

1.Find by CustomerID

2.Find by Name

Enter selection..2

Enter Name of Customer :Cays

List of Customers

Customer{id=3, name=Cays Horstman, phone=0987787676}

Customer{id=4, name=Cays Horstman, phone=0908778887}

Total : 2 customers.

**Notice: Student must strictly follow all requirements as describe above for marking,
Any modification the requirement detail is not allowed and will get no mark!**