

## Task 8: Collections

1. To Create a new model named **CourierCompanyCollection** in entity package replacing the Array of Objects with List to accommodate dynamic updates in the CourierCompany class.

### CODE:

```
package Entities;
```

```
import java.util.ArrayList;
```

```
import java.util.List;
```

```
public class CourierCompanyCollection {
```

```
    List<CourierCompany> list=new ArrayList<>();
```

```
    public CourierCompanyCollection() {
```

```
        this.list = new ArrayList<>();
```

```
    }
```

```
    public List<CourierCompany> getList() {
```

```
        return list;
```

```
    }
```

```
    public void setList(List<CourierCompany> list) {
```

```
        this.list = list;
```

```
    }
```

```
    public void addCourier(CourierCompany courierObj)
```

```
    {
```

```
        list.add(courierObj);
```

```
    }
```

```
    public void removeCourierCompany(CourierCompany company) {
```

```
        list.remove(company);
```

```
    }
```

```
@Override
public String toString() {
    return "CourierCompanyCollection{" +
        "list=" + list +
        '}';
}
```

2. Create a new implementation class

**CourierUserServiceCollectionImpl** class in package dao which implements ICourierUserService interface which holds a variable named companyObj of type CourierCompanyCollection

**CODE:**

```
package DAO;
```

```
import Entities.Courier;
import Entities.CourierCompanyCollection;
import Interface.ICourierUserService;
```

```
import java.util.HashMap;
import java.util.Map;
```

```
public class CourierUserServiceCollectionImpl implements
ICourierUserService {
```

```
    private CourierCompanyCollection courierObj;
```

```
    public
    CourierUserServiceCollectionImpl(CourierCompanyCollection
    courierObj) {
        this.courierObj = courierObj;
    }
```

```
    public CourierCompanyCollection getCourierObj() {
        return courierObj;
    }
```

```
public void setCourierObj(CourierCompanyCollection courierObj)
{
    this.courierObj = courierObj;
}
```

```
@Override
public String placeOrder(Courier courier) {
    return "";
}
```

```
@Override
public String getOrderStatus(Courier courier) {
    return "";
}
```

```
@Override
public boolean cancelOrder(Courier courier, String
trackingNumber) {
    return false;
}
```

```
@Override
public Courier[] getAssignedOrder(Courier courierobj, int empid) {
    return new Courier[0];
}
```

```
// This is the implementation for Collection type
//In CourierUserService Class implementation is done based on arrays
```

```
@Override
public Map<Integer, Courier> getAssignedOrderMap(Courier
courierobj, int empid) {
```

```
    Map<Integer,Courier> assignedcouriers=new HashMap<>();  
    assignedcouriers.put(empid,courierobj);  
    return assignedcouriers;  
}  
}
```