

Date : 04/09/2020  
project batch 11AM  
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-----  
Display All rows at UI  
[Fetch from Database]

#1. Here We need to use Repository method `findAll():List<T>` [T=Model class]

internally SQL query looks like : `select * from tab;`

#2. Call this method using Service Layer and Sort data if required by using Comparator.

#3. Read data in Controller using service and send to UI with Model memory

#4. At UI use Thymeleaf Loop(forEach loop) and display data in HTML table format.

-----code-----

#1. `IEmployeeService`

```
public List<Employee> getAllEmployees();
```

#2. `EmployeeServiceImpl`

```
public List<Employee> getAllEmployees() {  
    List<Employee> list = repo.findAll();  
    // Interface ob = (method params) -> {method body;}  
    list.sort((e1,e2)->e1.getId()-e2.getId());  
    return list;  
}
```

#3. `EmployeeController`

```
public List<Employee> getAllEmployees() {  
    List<Employee> list = repo.findAll();  
    // Interface ob = (method params) -> {method body;}  
    //list.sort((e1,e2)->e1.getId()-e2.getId());  
    list.sort(new Comparator<Employee>() {  
        @Override  
        public int compare(Employee e1, Employee e2) {  
            return e1.getId()-e2.getId();  
            //return  
e1.getId().compareTo(e2.getId());  
        }  
    });  
    return list;  
}
```

#4. UI : `EmployeeData.html`

```
<!DOCTYPE html>  
<html xmlns:th="https://www.thymeleaf.org/">
```

```

<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h3>EMPLOYEE DATA</h3>
<table border="1">
    <tr>
        <td>ID</td>
        <td>NAME</td>
        <td>EMAIL</td>
        <td>GENDER</td>
        <td>ADDRESS</td>
        <td>PROJECTS</td>
        <td>SLOTS</td>
    </tr>
    <tr th:each="ob:${list}">
        <td th:text="${ob.id}"></td>
        <td th:text="${ob.ename}"></td>
        <td th:text="${ob.email}"></td>
        <td th:text="${ob.gender}"></td>
        <td th:text="${ob.eaddr}"></td>
        <td th:text="${ob.prjs}"></td>
        <td th:text="${ob.slots}"></td>
    </tr>
</table>
</body>
</html>

```

\*) `th:each="tempVariable:${collectionName}"` behaves as for-each loop  
 \*) Lambda Expression Syntax:  
     Interface ob = (methodParams) -> { Method Body};

EX#1

```

interface Math {
    int add(int a,int b);
}

```

Lambda Expression:

```

Math m = (a,b) -> { return a+b; }
Math m = (a,b) -> a+b;

```

Ex#2:

```

interface Comparator<T> {
    int compare(T o1, T o2);
}

```

```

Comparator<Employee> com = ( e1, e2 ) -> { return e1.getId() -
e2.getId(); } //ASC
Comparator<Employee> com = ( e1, e2 ) -> e1.getId() - e2.getId();

list.sort(cm);
list.sort((e1, e2) -> e1.getId() - e2.getId());

```

```

---Model class-----
-----
package in.nareshit.raghu.model;

```

```

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import javax.persistence.Table;

import lombok.Data;

@Data
@Entity
@Table(name="uom_tab")
public class Uom {

    @Id
    @GeneratedValue
    @Column(name="uom_id_col")
    private Integer id;

    @Column(name="uom_type_col")
    private String uomType;
    @Column(name="uom_model_col")
    private String uomModel;
    @Column(name="uom_description_col")
    private String description;
}

```

```

-----
package in.nareshit.raghu.model;

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import javax.persistence.Table;

import lombok.Data;

@Data
@Entity
@Table(name="shipment_type_tab")
public class ShipmentType {
    @Id
    @GeneratedValue
    @Column(name="shp_id_col")
    private Integer id;
    @Column(name="shp_mode_col")
    private String shipmentMode;
    @Column(name="shp_code_col")
    private String shipmentCode;
    @Column(name="shp_enable_ship_col")
    private String enableShipment;
    @Column(name="shp_grade_col")
    private String shipmentGrade;
    @Column(name="shp_description_col")
    private String description;
}

```

ShipmentTypeRepository.java  
IShipmentTypeService.java  
ShipmentTypeServiceImpl.java  
ShipmentTypeController.java  
ShipmentTypeRegister.html  
ShipmentTypeData.html