EXERCISE 8

*INTERFACE-BASED PROJECTIONS*

#employee  
package com.example.EmployeeManagementSystem.projection;

public interface EmployeeNameProjection {

String getName();

String getEmail();

}

#repository

package com.example.EmployeeManagementSystem.repository;

import com.example.EmployeeManagementSystem.model.Employee;

import com.example.EmployeeManagementSystem.projection.EmployeeNameProjection;

import org.springframework.data.jpa.repository.JpaRepository;

import org.springframework.data.jpa.repository.Query;

import java.util.List;

public interface EmployeeRepository extends JpaRepository<Employee, Long> {

@Query("SELECT e FROM Employee e")

List<EmployeeNameProjection> findAllEmployeeNamesAndEmails();

}

*CLASS BASED PROJECTIONS*

#employee  
package com.example.EmployeeManagementSystem.dto;

public class EmployeeDTO {

private String name;

private String email;

public EmployeeDTO(String name, String email) {

this.name = name;

this.email = email;

}

// Getters and setters

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getEmail() {

return email;

}

public void setEmail(String email) {

this.email = email;

}

}

#repository

package com.example.EmployeeManagementSystem.repository;

import com.example.EmployeeManagementSystem.dto.EmployeeDTO;

import com.example.EmployeeManagementSystem.model.Employee;

import org.springframework.data.jpa.repository.JpaRepository;

import org.springframework.data.jpa.repository.Query;

import java.util.List;

public interface EmployeeRepository extends JpaRepository<Employee, Long> {

@Query("SELECT new com.example.EmployeeManagementSystem.dto.EmployeeDTO(e.name, e.email) FROM Employee e")

List<EmployeeDTO> findAllEmployeeDTOs();

}

*CUSTOM PROJECTIONS*

@value

package com.example.EmployeeManagementSystem.projection;

import org.springframework.beans.factory.annotation.Value;

public interface EmployeeFullNameProjection {

@Value("#{target.name + ' (' + target.email + ')'}")

String getFullNameAndEmail();

}

#REPOSITORY  
package com.example.EmployeeManagementSystem.repository;

import com.example.EmployeeManagementSystem.projection.EmployeeFullNameProjection;

import com.example.EmployeeManagementSystem.model.Employee;

import org.springframework.data.jpa.repository.JpaRepository;

import java.util.List;

public interface EmployeeRepository extends JpaRepository<Employee, Long> {

List<EmployeeFullNameProjection> findAllBy();

}