**Exercise 7: Employee Management System - Enabling Entity Auditing**

**application.properties**

spring.jpa.properties.hibernate.enhancer.enableDirtyTracking=true

spring.jpa.properties.hibernate.enhancer.association-management=TRACK\_BY\_VALUE

spring.jpa.auditing.enabled=true

**Employee**

package com.employee.management.system.entities;

import lombok.Data;

import javax.persistence.\*;

import java.util.Date;

@Data

@Entity

@Table(name = "employees")

public class Employee {

@Id

@GeneratedValue(strategy = GenerationType.IDENTITY)

private Long id;

private String name;

private String email;

@ManyToOne

@JoinColumn(name = "department\_id")

private Department department;

@CreatedBy

@Column(name = "created\_by")

private String createdBy;

@CreatedDate

@Column(name = "created\_date")

private Date createdDate;

@LastModifiedBy

@Column(name = "last\_modified\_by")

private String lastModifiedBy;

@LastModifiedDate

@Column(name = "last\_modified\_date")

private Date lastModifiedDate;

}

**Department**

package com.employee.management.system.entities;

import lombok.Data;

import javax.persistence.\*;

import java.util.Date;

@Data

@Entity

@Table(name = "departments")

public class Department {

@Id

@GeneratedValue(strategy = GenerationType.IDENTITY)

private Long id;

private String name;

@CreatedBy

@Column(name = "created\_by")

private String createdBy;

@CreatedDate

@Column(name = "created\_date")

private Date createdDate;

@LastModifiedBy

@Column(name = "last\_modified\_by")

private String lastModifiedBy;

@LastModifiedDate

@Column(name = "last\_modified\_date")

private Date lastModifiedDate;

}

In the above code, I have enabled auditing in the application by configuring auditing properties in application.properties.

I have used annotations like @CreatedBy, @LastModifiedBy, @CreatedDate, and @LastModifiedDate to track the creation and modification of employees and departments.

Note that I have also added the corresponding columns to the Employee and Department entities to store the auditing information.