Annotations used in our programs in REST api using JPA

What is JPA?

Spring boot

Did you notice Application.java class is annotated with

@SpringBootApplication

Is a kind of @SpringBootConfiguration

Is a kind of @Configuration

JPA

What is JPA?

Java Persistence Api

Frameworks implementing this concept are:

EJB

JPA

Hibernate

Spring (spring data jpa)

CrudRepository (when a method returns object, then it is not automatically converted into JSON)

JpaRepository (jpa uses JSON format by default)

JPA

Entity (models persistence)

Dao Data access object (jpa repository)

Object states

Detached I have an object, that is not present in db table

Managed state sync with a row in the db table

If you find a row and obtain an object rep of that row

JPAQL Jpa Querying Language

EJBQL EJB Querying Language

HQL Hibernate Querying Language

@Entity marks that this class is an entity class

@Table to mention the table name ( if not mentioned, then class name becomes table name)

Class name: Employee

Table name: EMPLOYEE

Class name: JavaStudent

Table name: JAVA\_STUDENT

spring.jpa.hibernate.naming.physical-strategy=org.hibernate.boot.model.naming.PhysicalNamingStrategyStandardImpl

@Id

Marks a property as primary key

@Column

We can specify the column name for this property

@NotNull

Activity:

1. Identify the jpa annotations

@OrderBy

@GeneratedValue

@Table

@Column

@Id

@NotNull

@Lob

@OneToOne

@OneToMany

@ManyToOne

@ManyToMany

@JoinTable

@Transient

Non persistent

<https://www.geeksforgeeks.org/hibernate-annotations/>

JPA Relationship

JPA Queries

How to use queries in JPA?

If you want to find Employee (all employees) findAll()

Find by id findById()

Find by name????

Find by department????

<http://localhost:8080/employee/department?dept=CSE>

?department means, department is a query string

url re-writing

example for 1 to M

Department vs Employee

M to M

Product vs Customer this relationship is M to M so the relationship become an entity

Sales

Pid

cid

Department vs Employee

New project:

Employee

Integer id;

String name;

Department department;

Department

Integer id;

String name;

<https://www.sanfoundry.com/1000-javascript-questions-answers/>

<https://github.com/jagasia/ust1/blob/jag/Javascript%20Handson%20Jag.docx>

<https://docs.google.com/spreadsheets/d/14ABg3ttlh3Vl5P4WX-OugL-RtmC9lEprhlYsF-tToR8/edit?usp=sharing>