**QUIZZES**

**SPRING DATA JPA QUIZ**

1. What is the aim of Spring Data JPA?

Answer: Spring Data JPA aims to reduce the amount of boilerplate code required for common database operations.

1. Which dependency is required to use Spring Data JPA in a Spring Boot application?

Answer: spring-boot-starter-data-jpa.

1. Which is the default JPA provider the Spring Data JPA internally uses?

Answer: Hibernate.

1. Which annotation marks a class as an entity in JPA?

Answer: @Entity.

1. Which interface do we extend to create a repository in Spring Data JPA?

Answer: JpaRepository.

1. What is the default implementation class of the JpaRepository interface?

Answer: SimpleJpaRepository class.

1. How can you define a derived query in Spring Data JPA?

Answer: By creating a method in the repository with a specific naming convention.

1. Which annotation is commonly used to mark a repository interface in Spring Data JPA?

Answer: @Repository.

1. Which annotation is used to autowire a repository into a Spring component?

Answer: @Autowire.

1. Which of the following is NOT a fetch type in JPA?

Answer: IMMEDIATE.

1. How do you execute a native query in Spring Data JPA?

Answer: @Query(nativeQuery = true).

1. Which of the following is NOT a valid Cascade type in JPA?

Answer: UPDATE.

1. How can you mark a field as the primary key in a JPA entity?

Answer: @Id.

1. What is the purpose of the @GeneratedValue annotation in Spring Data JPA?

Answer: To automatically generate primary key values for entities.

1. How can you customize the column name for a field in a JPA entity?

Answer: @Column(name=”custom\_name”).

16. Which annotation is used to specify a custom query in Spring Data JPA?

Answer: @Query.

1. Which annotation is used to create a Named JPQL query?

Answer: @NamedQuery.

1. How can you indicate a Many-To-One relationship in JPA?

Answer: @ManyToOne.

19. In a Spring Data JPA repository, how can you indicate a method should delete by a specific field?

Answer: deleteByFieldName.

20. Which of the following denotes a derived delete query in Spring Data JPA?

Answer: deleteByFieldName.

21. How can you perform pagination in Spring Data JPA?

Answer: Using the page and Pageable interfaces.

22. In JPA, which strategy generates a primary key assigned by the database?

Answer: GenerationType.IDENTITY.

23. Which annotation in JPA allows you to embed another object as part of your entity?

Answer: @Embedded.

24. How can you control transaction management in Spring Data JPA?

Answer: By using the @Transactional annotation.

25. How can you define custom database queries in Spring Data JPA?

Answer: Using the @Query annotation and JPQL or native SQL queries.

26. Choose the correct Query Method:

Consider a *Student* entity:

@Entity

@Table(name = "student")

public class Student {

@Id

@GeneratedValue(strategy = GenerationType.IDENTITY)

@Column(name = "id")

private int id;

@Column(name = "first\_name")

private String firstName;

@Transient // Field will not be saved in a database

private String lastName;

// getter and setter methods

}

Select the correct query method to find a student by *firstName* or *LastName*.

Answer: findByFirstNameOrLastName(String firstName, String lastName).

**HIBERNATE QUIZ**

## What is Hibernate in Java?

### Answer:

c) An ORM (Object-Relational Mapping) framework

## 2. Which file is used to configure Hibernate settings?

### Answer:

b) hibernate.cfg.xml

## 3. Which Hibernate interface is used to create a session?

### Answer:

a) SessionFactory

## 4. What is the purpose of the Session interface in Hibernate?

### Answer:

c) To perform CRUD operations on persistent objects

## 5. Which of the following is a core interface of Hibernate?

### Answer:

d) All of the above

## 6. Which method is used to save an object in Hibernate?

### Answer:

c) save()

### Explanation:

The save() method is used to save an object in Hibernate, persisting it to the database.

## 7. Which method in Hibernate is used to update an existing record?

### Answer:

a) update()

## 8. What does the saveOrUpdate() method do in Hibernate?

### Answer:

a) It saves a new object if it does not exist, or updates it if it already exists

## 9. What is HQL in Hibernate?

### Answer:

a) Hibernate Query Language

## 10. Which annotation is used to specify an entity in Hibernate?

### Answer:

b) @Entity

## 11. What is the default fetching strategy in Hibernate for @ManyToOne relationships?

### Answer:

a) EAGER

## 12. Which method is used to delete an object in Hibernate?

### Answer:

b) delete()

## 13. What is the use of the Configuration class in Hibernate?

### Answer:

d) All of the above

## 14. Which annotation is used to specify a primary key in Hibernate?

### Answer:

c) @Id

## 15. Which method is used to execute an HQL query in Hibernate?

### Answer:

c) createQuery()

## 16. Which Hibernate feature allows automatic table creation and schema updates?

### Answer:

a) Schema Generation

## 17. What does the @OneToMany annotation signify in Hibernate?

### Answer:

b) A relationship where one entity is associated with multiple entities

## 18. What does the @ManyToMany annotation signify in Hibernate?

### Answer:

d) A relationship where many entities are associated with many entities

## 19. Which feature of Hibernate allows caching of data for better performance?

### Answer:

d) Second-level cache

## 20. Which method is used to commit a transaction in Hibernate?

### Answer:

b) commit()

## 21. What does the @Embedded annotation do in Hibernate?

### Answer:

a) It specifies that a field is embedded in the entity

## 22. What is the purpose of the @Table annotation in Hibernate?

## Answer: a) To map a class to a specific database table

## 23. What is the purpose of the @Inheritance annotation in Hibernate?

### Answer:

a) To specify an inheritance strategy for an entity

## 24. What is a native query in Hibernate?

### Answer:

b) A SQL query written in the native SQL language of the database

## 25. Which Hibernate feature allows lazy loading of data?

### Answer:

c) LAZY loading