

#### 1: Introduction to Hibernate

- Drawbacks of direct JDBC
- Plain Old Java Object (POJO)
- What is O-R Mapping
- Simple Database Application

### 2: Hibernate Configuration

- Required JAR Files
- Hibernate configuration File
- Hibernate properties File
- Hibernate XML File
- SQL Dialects

### 3: Hibernate Concepts

- Id and Primary Key
- Id Generation Methods
- SessionFactory
- Session
- Transaction
- Developing CRUD Application

## 4: Hibernate O-R Mapping

- Mapping Declarations
- Modeling Composition with
- Relationship
- Modeling Composition with
- Components
- One-to-One Association
- One-to-Many Association
- Many-to-Many Association
- Uni and Bidirectional Associations
- Hibernate Value Types
- Custom Types

### 5: Manipulating and Querying

- Persistent Objects
- Object Loading
- Executing Queries
- Iterating Results

# **Empire Techs**

Rajdhani Complex, OfficeNo. A/408, 4th Floor, Near Shankar Maharaj Math Pune - Satara Road,Pune-411043 (+91) 9975708774 / 9623922545 Email:info@empiretechs.in Website:empiretechs.in



- Scalar Results
- Bind Parameters Pagination

### 6: Hibernate Query Language

- Select clause
- From clause
- Where clause
- Aggregate functions
- Expressions
- Sorting
- Grouping
- Sub queries

### 7: Criteria Queries

- Creating Criteria
- Narrowing the Result
- Ordering the Result

#### 8: Native SQL

- Using SQL Query
- Named SQL Query
- Using Stored Procedure for Querying
- Creating Custom SQL for CRUD

## 9: Transaction and Concurrency

- Session and Transaction Scopes
- Database Transaction Demarcation
- Optimistic Concurrency Control
- Pessimistic Concurrency Control
- Connection Release Modes

# **Empire Techs**

Rajdhani Complex, OfficeNo. A/408, 4th Floor, Near Shankar Maharaj Math Pune - Satara Road, Pune-411043 (+91) 9975708774 / 9623922545 Email:info@empiretechs.in Website:empiretechs.in