Hibernate Framework Training Course

Project Based Immersive Learning Course

Course Overview?

Hibernate is a popular framework used for object-relational mapping in Java environments. The Education Nest offers a certificate course that focuses on teaching individuals how to effectively utilize the Hibernate Framework. The course is designed by industry experts and covers key concepts such as Spring REST, Spring MVC, Spring Boot, Hibernate CRUD operations, among others. Real-time projects are incorporated in the course to aid in understanding these concepts, and each line of code is explained in a simple manner. The course is led by an experienced instructor who will guide participants through the fundamental concepts of core, annotations, Java configuration, AOP, spring MVC, hibernate, and Maven. In addition, the course delves into the specifics of Hibernate mapping, queries, transactions, and concurrency.

Benefits of Hibernate Framework Training Course :

As the use of data is increasing every day, the complexity and use of databases are increasing exponentially. Hence, it is essential to have a framework that helps handle connections, sessions, transactions, and life cycles of databases. Hibernate can optimize database access and improve performance by reducing the number of SQL queries executed against the database. Hibernate

provides a wide range of features such as caching, lazy loading, and connection pooling . Expertise in the Hibernate Framework can open up opportunities for career advancement in enterprise application development, as it is a widely preferred option for such projects.

Who should learn:

- Java developers
- UI developers
- Programmers
- Web developers
- Java Architect

Why do you need Hibernate Framework Training Course?

Average Salary Growth:

The salary growth of a Hibernate Framework developer can vary depending on several factors such as experience, location, and industry. However, according to data from Payscale, the average salary of a Hibernate Developer in the United States is around $84,000 per year. With increased experience and expertise, the salary can go up significantly, and senior-level Hibernate developers can earn up to $130,000 per year or more. Moreover, working in high-tech industries and large enterprises can offer higher salaries and opportunities for career growth.

Industries:

Many multinational corporations (MNCs) use Java-based enterprise applications that rely on Hibernate for database access and management. As a result, Hibernate Framework developers are in demand in several MNCs, particularly in the technology, finance, and healthcare industries. For example, MNCs such as IBM, Oracle, Microsoft, and Accenture are known to use Hibernate in their enterprise applications, making them potential employers for Hibernate Framework developers. Additionally, many startups and mid-sized

companies also use Hibernate, creating more job opportunities for developers with Hibernate expertise.

Position in Market:

According to the US Bureau of Labor Statistics (BLS), employment of software developers, including Java and Hibernate developers, is projected to grow 21% from 2020 to 2030, much faster than the average for all occupations. This growth is driven by the increasing demand for computer software and mobile applications across various industries, including healthcare, finance, and e-commerce.

Designations:

- Hibernate Developer
- Jave Developer
- Full Stack Developer
- Front-end Engineer
- Java Backend Developer
- Java Software Engineer

Why Hibernate Framework Course from Education Nest

- **Free Demo on Request**
- **Live Interactive Learning**
- **Lifetime Access**
- **Flexible Schedules**
- **24x7 Support**
- **One on One Doubt Clearing**
- **Real Time Project-Based Learning**
- **Certificate Oriented Curriculum**

Key Skills Covered:

- Object-Relational Mapping (ORM
- Hibernate Architecture
- Hibernate Configuration
- Hibernate Mapping
- CRUD Operations

- Querying Data
- Transaction Management
- Caching
- Integration with Spring

Hibernate Framework Course Syllabus

Hibernate Introduction

- What is Hibernate?
- Object Relation Mapping(ORM)
- JDBC vs Hibernate
- Installing Hibernate
- Using Hibernate with an IDE

Getting Started With Hibernate

- POJO and Persistence
- Creating Hibernate Mappings
- Hibernate Configuration File
- Session Factory
- Session
- Working with Entities
- Transactions Queries

Hibernate Persistence Objects

- Object States in Hibernate

- Common Hibernate Methods
- Working with Entities

Hibernate Mapping with XML

- Mapping Entities with Tables
- Mapping Columns and Datatypes
- Component Mapping

Hibernate Mapping with Annotations

- Introduction to Annotations
- Annotation Pros and Cons
- Basic Annotations in Hibernate
- Mapping Entities and Tables
- Mapping Columns and Data Types

Transactions – Part 1

- Transactions
- ACID Properties
- Hibernate and Thread-Safety
- Introduction of HibernateUtil Class
- Committing & Rolling Back Transactions

Generators – Part 1

- What are Generators
- About Generators Classes

Basic of HQL

- HQL Introduction
- Retrieving Data
- Using operators
- Sorting Results
- Using Scalar Queries
- Using Parameters

- Aggregate Funtions
- SubQuery
- Pagination
- GroupBy and Having Clauses
- Non-Select Queries
- Named Queries

Native SQL

- Native SQL Introduction
- Retrieving Data
- Using Operators
- Using Scalars Queries
- Using Parameters
- Pagination
- Named Query
- Using Aggregate Functions
- Using Stored Procedure

Criteria API

- Criteria query basics
- Criteria vs Criterian
- Limitations of Criteria
- Restrictions and projections
- Ordering and pagination

Versioning & Inheritance Mapping

- Versioning
- Inheritance Mapping Introduction
- Table per Class Mapping
- Table per Subclass Mapping
- Table per Concrete Mapping

Hibernate Association Mapping

- Association Mappings
- One to One Association Mapping
- One to Many Association Mapping
- Many to One Association Mapping
- Many to Many Association Mapping
- Collection Mapping Introduction
- How Collection Mapping Works?
- Collection Mapping Vs Association Mapping
- Using XML Configurations
- Using Annotations

Hibernate Caching

- Cache Introduction
- First Level Cache
- Second Level Cache
- Query caching
- Evicting objects from cache

Connection Pool

- Connection Pool Introduction
- Default Pool
- Third Party Vendor Connection Pool
- Server Supplied Pool

Shopping Cart Application

Customer Data Application

Trackify Application

Hibernate and Spring Integration

- Overview of Spring Framework
- Configuring Hibernate with Spring

- Integration with Spring Transaction Management
- Using Hibernate with Spring MVC

Career Support

Profile Building :

Experienced professionals are available to offer tailored assistance in crafting your CV and online profiles, taking into account your unique educational and experiential background.

Interview Preparation :

The upcoming interview preparation service will include personalized one-on-one sessions and the option for mock interviews if needed.

Job Referrals :

At Education Nest, we receive a variety of job requirements from diverse sources such as organizations, our clients, HR consultants, and a vast network of Education Nest currently employed in different companies. We strive to meet these varied requirements to the best of our abilities.

Continuous Support :

We offer continuous support for as much time as you need it, and a considerable number of our learners receive multiple interviews offers and promising employment opportunities as a result of the abilities they gain during the program.