

Course Details

Core Java

- 1) What is Java?
- 2) Path Set for Java
- 3) JVM,JDK and JRE
- 4) Internal architecture of JVM
- 5) Simple java program
- 6) Object and Class
- 7) constructor
- 8) this and super keywords
- 9) String in Java
- 10) Arrays in Java
- 11) Typecasting in Java
- 12) OOps Concepts
 - a) Inheritance
 - b) Polymorphism
 - c) Abstraction
 - d) Encapsulation
- 13) Inner classes
- 14) Wrapper Class
- 15) Exception
- 16) IO packages
- 17) Collection Framework
 - a) List interface
 - b) Map interface
 - c) Set interface
- 18) Comparable interface
- 19) Comparator interface
- 20) Multithreading in Java

Java 1.8

- 1) Java 8 features
- 2) Java 8 Lambda expression
- 3) Java 8 Functional interfaces
- 4) Java 8 Function, Predicate, Consumer and Supplier
- 5) Java @FunctionalInterface Annotation
- 6) Method reference
- 7) Stream API
- 8) Java 8 Stream - Creating Stream Objects Example
- 9) Java 8 Stream - filter() and forEach() Example
- 10) Java 8 Lambda - Sort List
 - in Ascending and Descending Order | Comparator Example
- 11) Java Sort List (ArrayList)
 - in Ascending and Descending Order using Java 8 Stream API
- 12) Java 8 Static and Default methods
- 13) Java 8 Collector Class
- 14) Different Ways to Iterate over List, Set, and Map in Java
- 15) Collections Aggregate Operations

Design Patterns

- 1) Creational Design Pattern
 - a) Factory Design Pattern
 - b) Prototype Design Pattern
 - c) Singleton Design Pattern
- 2) Structural Design Pattern
 - a) Adapter Design Pattern
 - b) Facade Design Pattern
 - c) Proxy Design Pattern
- 3) Behavioral Design Pattern
 - a) Chain of Responsibility Design Pattern
 - b) Template Design Pattern
 - c) Strategy Design Pattern

Hibernate 5.0 and Spring 5.0

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|---|--|
| 1) Introduction to Hibernate | 1) Spring Introduction |
| 2) Hibernate Architecture | 2) Spring Modules |
| 3) First Hibernate Example | 3) Spring Architecture |
| 4) HB Generator classes | 4) Spring Life Cycle |
| 5) Inheritance Mapping | 5) Spring Bean Scope |
| a) Table Per Class | 6) Spring IOC and Dependency Injection(DI) |
| b) Table Per Sub-Class | 7) Constructor Injection |
| c) Table Per Concrete Class | a) CI with Dependent Object |
| 6) Hibernate Mapping | b) CI with String Object |
| a) Mapping List | c) CI with Collection |
| b) Mapping Set | 8) Setter Injection |
| c) Mapping Map | a) SI with Dependent Object |
| d) One to One(xml) | b) SI with String Object |
| e) One to One(annotation) | c) SI with Collection |
| f) One to Many(xml) | 9) Spring auto-wiring |
| g) One to Many(annotation) | a) Auto-wiring byName |
| h) Many to Many(xml) | b) Auto-wiring byType |
| i) Many to Many(annotation) | 10) Spring Transaction |
| 7) txn Management | 11) Spring ORM |
| 8) HQL(Hibernate Query Language) | 12) Spring MVC |
| 9) HQL CRUD Operations | 13) Spring Model and Controller |
| 10) HQL with Aggregate functions | 14) Spring Integration |
| 11) Primary and Secondary Cache | 15) Spring Security(Web Application) |
| 12) Criteria in Hibernate | |
| 13) Criteria with Projection | |
| 14) Named Queries in Hibernate | |
| 15) Hibernate Caching(First and Second Level) | |

Springboot and Microservices

- 1) Springboot Introduction
- 2) Difference between Spring and Springboot
- 3) Creating Springboot with SpringInitializer
- 4) Installing Springboot project with Maven
- 5) Springboot Helloworld example
- 6) Overview of Springboot starters, Actuators
- 7) Springboot Annotations
- 8) Springboot with Hibernate/JPA
- 9) Springboot PathVariable,RequestBody
ResponseBody and ResponseStatus
- 10) One Project using
Springboot 2.0 + JSP + Hibernate 5.0
+ Tomcat 8.5 + MySql + SpringMVC

MicroServices Architecture

MicroServices Design Patterns

Projects to fill your career gaps

- 1) Banking Domain
- 2) Insurance Domain
- 3) Telecom Domain
- 4) HealthCare Domain
- 5) Media Domain
- 6) Travel Domain