

Advanced Java

Topics covered in Advanced Java Course

- Core Java Syllabus full

- JDBC
 1. JDBC Introduction
 2. JDBC Architecture
 3. Database Overview
 4. JDBC Basics
 5. My SQL
 6. Create Database
 7. Create Table
 8. Insert, Update, Delete
 9. Truncate
 10. SQL
 - Join
 - Inner
 - Join
 - Left Outer
 - Join Right
 - Outer Join
 - Full Outer
 - Join
 11. Aggregate Function
 1. MIN
 2. MAX
 3. AVG
 4. SUM
 5. COUNT

12. SQL HAVING Clause
13. GROUP BY
14. ORDER BY
15. SQL Aliases
16. SQL LIKE Operator
17. SQL IN
18. SQL NOT IN
19. SQL Between
20. SQL Null Values
21. SQL LIMIT
22. SQL Stored Procedures
23. Java Application Using JDBC Connectivity
24. Handling SQL Exceptions
25. DriverManager
26. ResultSet
27. Connection
28. Statement
29. Prepared Statement
30. Callable Statement
31. DB Connectivity Steps
32. Store Image in SQL
33. Read Image in SQL
34. SQL Queries using SQLYog
35. JDBC CRUD Application

- Servlet

- Servlet Basics
 - Need of Server Side Programming
 - Servlet Life Cycle 1 Init()
- 2 Service()
 - 2.1 doGet()
 - 2.2 doPost() 3 Destroy()
 - Servlet Hello World Application
 - Web.xml Structure
 - Servlet Directives- include(), forward(), sendRedirective()

- HttpServletRequest, HttpServletResponse in Servlet
- Servlet and JDBC Integration
- Servlet, HTML 5, MySQL-JDBC, Apache Tomcat using Real Time Login Application
- Servlet, JSP, MySQL- JDBC, Apache Tomcat using Custom CRUD Application
- Servlet, JSP, MySQL- JDBC, Apache Tomcat using Custom Sign Up | Sign In Application

- 2.1 JSP
 - 2.1.1 JSP Basics
 - 2.1.2 Creating dynamic Web content with JSP
 - 2.1.3 Scriptlet
 - 2.1.4 Declaration

 - 2.1.5 Servlet, JSP, MySQL- JDBC, Apache Tomcat Login Application
 - 2.1.6 Servlet, JSP, MySQL- JDBC, Apache Tomcat using User Sign Up | Sign In Application
 - 2.1.7 Servlet, JSP, MySQL- JDBC, Apache Tomcat Using Advanced Custom Project Implementation

- 3. FRAMEWORK
 - 3.1. Hibernate
 - 1. Hibernate Introduction
 - 2. Hibernate Basics
 - 3. Hibernate Architecture
 - 4. Hibernate Session
 - 5. Hibernate Configuration
 - 6. Hibernate Configuration Offline
 - 7. Hibernate with Annotation
 - 8. Hibernate Validator
 - 9. Hibernate CRUD
 - 10. Hibernate Association Mapping
 - 1. One to One Mapping
 - 2. One to Many Mapping
 - 3. Many to One Mapping
 - 4. Many to Many Mapping
 - 11. Hibernate Aggregation
 - 12. Hibernate Named Queries
 - 13. Hibernate Native SQL
 - 14. HQL- Hibernate Query Language

15. **Hibernate HCQL- Criteria Query Language**
16. **Hibernate Application with Mysql DB- CRUD**
17. **Diff. save(), saveOrUpdate(), update(), persist() and merge()**
18. **Diff. get() and load()**
19. **Hibernate vs. JPA**
20. **Hibernate Application with Mysql DB, Servlet, JSP-User Interface- CRUD**

21. Hibernate, MySQL, Servlet, JSP, Apache Tomcat Login Application
22. Hibernate, MySQL, Servlet, JSP, Apache Tomcat Sign Up | Sign In Application
23. Hibernate, MySQL, Servlet, JSP, Apache Tomcat Advanced Custom

Project Implementation Programming practices, Concept & Interview

Preparation.

- 3.2. Spring Framework
 1. Spring Framework Introduction
 2. Spring Basics
 3. Inversion of Control
 4. Dependency Injection
 5. Spring Annotations
- 3.3. Spring MVC
 1. Spring MVC Basics
 2. Spring MVC Annotations
 3. Spring MVC Hello World Application
 4. Spring MVC Restful Web Services Basics
 5. Spring MVC without Maven
 6. Apache Maven Basics
 7. Spring MVC with Maven
 8. Spring MVC Application Deployment
 9. Spring MVC, Hibernate, Mysql, Apache Maven, Apache Tomcat- CRUD Operation
- 3.4. Spring Security
 1. Spring Security Basics
 2. Spring Security Features
 3. Spring Security Authentication

4. Spring Security Encryption
5. Password Encryption by using Spring Security
6. Spring Security Login Form
7. Spring Security Authentication

3.5. Spring Boot

1. Spring Boot Introduction
2. Spring Boot Basics
3. Why Spring Boot
4. Spring Boot Features
5. Main Goal of Spring Boot
6. Creating Project- Spring Initializer

7. Spring Boot Hello World Application
 8. Spring Boot Annotations
 9. Spring Boot Devtool Dependency- Without Restart application will see changes on browser
 10. Spring Boot Build Systems
 11. Spring Boot Code Structure
 12. Spring Boot with RESTful Service
 13. Spring Boot with Logger
 14. Deploy Spring Boot Applications on External Tomcat Server
 15. Spring Boot – Common Application Properties (application.properties)
 16. Spring Boot, Hibernate with RESTful Web Service
 17. Spring Boot, Spring Data with RESTful Web Service
 18. Spring Boot, Hibernate CRUD Application
 19. Spring Boot, Spring Data JPA CRUD Application
 20. Spring Boot, Spring- JDBCTemplate CRUD
 21. Spring Boot, Hibernate, MySQL, Project Lombok CRUD Application
 22. Spring Boot with JSON Payload using Postman API
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- 3.6. Spring Data- JPA
 1. Spring Data JPA Basics
 2. Spring Data JPA Introduction
 3. Spring Data JPA Architecture
 4. Spring Data JPA application.properties file
 5. JPA Repository
 6. CRUD Repository
 7. Spring Boot, Spring Data JPA CRUD using Postman API
 8. Spring Boot, Spring Data JPA, Project Lombok CRUD using Postman API Hands on Session
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- 3.7. Spring- JDBC Template
 1. Spring JDBCTemplate Introduction
 2. RowMapper
 3. Builder
 4. Spring Boot, JDBCTemplate using Postman API Hands on Session
 5. Industrial Practices for Spring Boot JDBCTemplate

6. Real Time Signup and Signin Application using JDBCTemplate
7. Advanced Research and Development for JDBCTemplate using Spring Boot

4. WEB SERVICES

- 4.1. SOAP Web Service
- 4.2. RESTful Web Service

5. MICROSERVICES

- 5.1. Microservices Introduction
- 5.2. Microservices Architecture
- 5.3. Microservices Project Structure
- 5.4. Microservices Frameworks
- 5.5. Spring Boot with Microservices Basics
- 5.6. Spring Boot with Microservices Coding Standards
- 5.7. Spring Boot with Microservices Builder Design Pattern
- 5.8. Spring Boot with Microservices QR Code Generator

- 6. INTERVIEW QUESTIONS &
PREPARATIONS Developer Life
Programming
practices Concepts
Interview Preparation.

Job roles after learning Java

- Junior developer
- Java Web developer
- Java Android developer
- Java EE Developer

Top Companies hiring Java developers

- Tata Consultancy service
- Accenture
- Infosys
- Wipro
- IBM
- Cognizant

Famous sites using Java

- [Linkedin.com](https://www.linkedin.com)
- [Microsoft.com](https://www.microsoft.com)
- [Csdn.com](https://www.csdn.com)
- [Adobe.com](https://www.adobe.com)
- [Booking.com](https://www.booking.com)
- [Amazonaws.com](https://www.amazonaws.com)