

FULL STACK JAVA - J2E & ITS FRAMEWORK PROGRAM

RC™ Ramaq
Chools
Consulting & Training

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INTRODUCTION TO FULL STACK JAVA

Welcome, future Java expert! The Full Stack Java – J2E & its Framework course is a comprehensive training program that teaches you how to develop web applications using Java technologies. You will learn both front-end and back-end aspects of web development, as well as popular frameworks such as Spring, Hibernate, and SOA. By the end of this course, you will be able to create dynamic, responsive, and scalable web applications using Java.





Why Choose Chools?

Numbers That Speak for Themselves:

- 10,000+ Successful Alumni: Join a network of impactful professionals.
- 95% Job Placement Rate: Secure your future with Chools' proven track record.
- 20+ Years of Excellence: Trust in a legacy of education and industry expertise.
- 200+ Industry Partnerships: Leverage our connections for real-world insights and opportunities.

What Sets Us Apart?


- **Expert Instructors:** Learn from industry veterans with hands-on experience.
- **Hybrid Learning Model:** Balance online flexibility with in-person engagement.
- **Comprehensive Curriculum:** Stay ahead with courses designed to meet market demands.
- **Community and Networking:** Be part of an active community of learners and professionals.

Who Can Apply?

Eligibility Criteria:

- A bachelor's degree or equivalent in computer science, engineering, mathematics, or a related field.



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- A solid understanding of core Java programming, object-oriented concepts, data structures, and algorithms.
 - A working knowledge of web development technologies, such as HTML, CSS, JavaScript, Servlets, JSP, etc.
 - Familiarity with database systems, such as MySQL, Oracle, MongoDB, etc.

Program Overview

The Full Stack Java – J2E & its Framework Program at Chools is designed to provide a comprehensive education in Java web development. Our curriculum covers a wide range of topics to ensure a thorough understanding, combining theoretical knowledge with practical, hands-on experience.

Learning Mode:

- **Hybrid Learning Model:** Combines online learning with in-person sessions for flexibility and interactive engagement.
- **Interactive Sessions:** Includes live webinars, workshops, and Q&A forums with expert instructors and peers.
- **Self-paced Learning:** Access course materials anytime, allowing you to learn at your own pace.



Skills Learned

- **Java Fundamentals:** Mastering Java syntax, object-oriented programming concepts, and file handling.
- **Web Development:** JSP, Servlets, JSF for creating web pages and handling user requests.
- **Frameworks:** Spring, Hibernate for dependency injection, data persistence, and web development.
- **Service-Oriented Architecture (SOA):** Web services and creating scalable architectures.
- **Front-End Development:** Angular for creating single-page applications.
- **Database Management:** MySQL, Oracle, MongoDB for data storage and retrieval.

Job Positions and Opportunities

- **Career Paths:** Full Stack Developer, Java Developer, Web Developer, Software Engineer, Backend Developer, Front-End Developer.
- **Industry Demand:** High demand across various sectors, competitive salaries, and strong growth potential.

Key Industry Verticals

- **Skill Application Areas:** Technology, Finance, Healthcare, Retail, Manufacturing, Marketing, Telecommunications, Education, Logistics and Supply Chain, Government and Public Services.

Professional Development

- Continuous Learning: Stay updated with the latest trends.
- Networking Opportunities: Connect with industry experts, peers, and alumni.
- Ethical Considerations: Learn best practices and industry standards.

By completing the Full Stack Java - J2E & its Framework Program at Chools, you'll gain the skills, knowledge, and certification needed to excel in Java web development, positioning yourself as a valuable asset to any organization.

Program Objectives

- Master technical skills in Java web development.
- Implement advanced web development techniques.
- Explore front-end and back-end Java frameworks.
- Address real-world development challenges.
- Understand best practices in software development.
- Foster continuous learning.
- Encourage teamwork and collaboration.
- Prepare for advanced roles in web development.

Expected Outcomes

- Proficiency in full stack development tools and techniques.
- Practical experience through hands-on projects.
- Strong analytical and problem-solving skills.
- Application of best practices in software development.
- Innovation in web development solutions.



PROGRAM OUTLINE

Stage 1: Fundamentals of Java

1. Java Fundamentals

- o Core principles, syntax, object-oriented programming concepts, file handling.

2. Advanced Java Topics

- o In-depth study of Java features and capabilities.

Stage 2: Advanced Java and Frameworks

3. Java Server Pages (JSP), Servlets, and JavaServer Faces (JSF)

- o Creating web pages and handling user requests.

4. Hibernate Framework

- o Object-relational mapping and data persistence.

5. Spring Framework

- o Dependency injection, aspect-oriented programming, web development.

6. Service-Oriented Architecture (SOA)

- o Web services and scalable architectures.

7. Angular Framework

- o Front-end development and creating single-page applications.

Stage 3: Practical Applications

8. Data Cleaning and Preprocessing

- o Techniques for ensuring data quality and reliability.

9. Exploratory Data Analysis (EDA)

- o Analyzing data distributions, identifying patterns.

10. Building Java Applications

- o Implementing and optimizing Java-based applications.

Stage 4: Capstone Project

11. Integration of Learned Skills

- o Apply tools and techniques to real-world Java projects.

12. Advanced Java Techniques

- o Deepening knowledge and exploring advanced Java capabilities.

Elective Modules

13. Data Ethics and Privacy

- o Ethical considerations, privacy laws, compliance strategies.



PROGRAM OUTLINE

14. Predictive Analytics with Java

- o Building and validating predictive models.

15. AI for Java Development

- o Implementing AI solutions in Java applications.

16. Advanced Data Warehousing Techniques

- o Optimizing data warehousing solutions.

17. Data-Driven Decision Making

- o Using data to inform and drive business strategies.

18. Cloud Java Solutions

- o Deploying Java applications and services on cloud platforms.

19. Java Project Management

- o Leading Java projects, ensuring successful delivery.

20. Big Data Security

- o Securing data in big data environments.

21. Java for IoT

- o Managing data generated by IoT devices.

Enrollment Now Open!

Take the first step towards becoming a certified Java developer. Enroll in our **Full Stack Java – J2E & its Framework Program** and enhance your career with Chools.