



Softcrayons

CORE AND ADVANCE JAVA

*Empowering minds
shaping futures*



PROFESSIONAL CERTIFICATION IN

CORE AND ADVANCE JAVA



PROSPECTUS



Key Advantages of Choosing Softcrayons

FOR STUDENTS

Supplemental Learning Resources: Softcrayons offers offline and online courses, educational materials, and additional resources that can complement and enhance college students' learning.

Skill Development: Softcrayons offer courses and certifications focused on developing specific skills that are in high demand in the job market.

Career Exploration: Softcrayons offer a wide range of courses across various disciplines, enabling college students to explore different fields and potential career paths.

Industry Relevance: Softcrayons frequently collaborates with industry professionals and experts to ensure that the knowledge and skills imparted are relevant and aligned with current industry practices and trends.

FOR FREELANCER & JOB SEEKER

Flexibility: Softcrayons offers online courses and programs that can be accessed from anywhere.

Skill Development: To acquire in-demand skills according to the latest industry trends and technologies to stay competitive in the job market.

Key Advantages of Choosing Softcrayons

Certifications: Softcrayons provides you with Professional Certifications and helps you with Resume Enhancement.

Career Support: Softcrayons also offers career counseling and job placement assistance, which can be invaluable for freelancers seeking new projects or job seekers looking for employment.

FOR ENTREPRENEURS AND BUSINESS OWNER

Upskilling and Reskilling: As the business landscape evolves rapidly, Softcrayons ensure that you stay up-to-date with the latest trends, technologies, and best practices.

Flexible Learning: Online courses offered by Softcrayons allow you to learn at your own pace, fitting your studies around your busy schedules.

Entrepreneurial Skills Development: Softcrayons offers courses and programs specifically designed to help entrepreneurs develop essential skills.

Cost-effective: Softcrayons provides more affordable learning options that help you invest in your professional development without straining your budget.

About The Program



Core Java serves as the foundation, covering fundamental concepts like syntax, data types, control flow, object-oriented programming, exception handling, and input/output operations. Mastering it equips developers with essential skills for robust and efficient applications. Advanced Java builds upon Core Java, focusing on specialized areas like servlets, JSP, JDBC, session management, filters, listeners, and web application security. It delves into internationalization, JavaMail API, and file handling. With a deeper grasp of Advanced Java, developers can create dynamic, feature-rich web applications for enterprise-level projects, making it vital for Java development.



CORE AND ADVANCE JAVA

TRAINING CURRICULUM

1 Introduction to Java

- What is Java?
- History and evolution of Java
- Features of Java
- Installing Java Development Kit (JDK)
- Setting up Java Development Environment (IDE)

2 Basics of Java Programming

- Structure of a Java program
- Writing and running your first Java program
- Basic syntax and rules
- Comments in Java

3 Data Types and Variables

- Primitive data types: int, double, char, boolean
- Reference data types: String
- Declaring variables
- Initializing variables
- Scope and lifetime of variables

4 Operators

- Arithmetic operators
- Assignment operators
- Comparison operators
- Logical operators
- Bitwise operators

5 Control Flow Statements

- if statement
- else-if ladder
- switch statement
- while loop
- do-while loop
- for loop
- break and continue statements

6 Java Functions

- Declaring and defining functions (methods)
- Method parameters and return types
- Method overloading
- Recursion and its applications

7 Arrays

- Declaring and initializing arrays
- Accessing elements of an array
- Multidimensional arrays
- Array manipulation

8 Object-Oriented Programming Concepts

- Classes and objects
- Constructors
- Methods
- Encapsulation
- Inheritance
- Polymorphism

9 Strings

- String class and its methods
- String concatenation
- String comparison
- String manipulation

10 Exception Handling

- Understanding exceptions
- try-catch blocks
- Handling exceptions with multiple catch blocks
- finally block
- Custom exceptions

11 Packages and Access Modifiers

- Creating and using packages
- Importing packages
- Access modifiers: public, private, protected, default

12 Interfaces and Abstract Classes

- Declaring and implementing interfaces
- Abstract classes and methods
- Differences between interfaces and abstract classes

13 Collections Framework

- ArrayList
- LinkedList
- HashMap
- HashSet
- Iterator

14 File Handling

- Reading from and writing to files
- File class
- FileReader and FileWriter
- BufferedReader and BufferedWriter

15 Servlets

- Introduction to Servlets
- Servlet Lifecycle
- Handling HTTP Requests and Responses
- Working with Form Data
- Servlet Collaboration and Communication
- Session Management
- Servlet Filters

16 JavaServer Pages (JSP)

- Introduction to JSP
- JSP Architecture
- JSP Syntax and Directives
- Scripting Elements: Scriptlets, Expressions, Declarations
- Implicit Objects
- JSP Actions: Include, Forward
- Expression Language (EL)
- JSP Standard Tag Library (JSTL)

17 JDBC (Java Database Connectivity)

- Introduction to JDBC
- JDBC Drivers
- Establishing Database Connection
- CRUD Operations: Creating, Reading, Updating, Deleting data
- Prepared Statements and Stored Procedures
- Batch Processing
- Transaction Management

18 Session Management and Cookies

- Overview of Session Management
- Using Cookies for Session Tracking
- Hidden Form Fields for Session Management
- URL Rewriting

19 Filters and Listeners

- Introduction to Filters and Listeners
- Writing and Implementing Filters
- Writing and Implementing Listeners
- Servlet Context and Servlet Context Listeners

20 File Upload and Download

- Uploading Files in Servlets
- Downloading Files from Servlets
- Working with File Streams

21 Internationalization and Localization

- Introduction to Internationalization and Localization
- Using Resource Bundles
- Locale and ResourceBundle classes

22 JavaMail API

- Sending Email using JavaMail
- Configuring Mail Sessions
- MIME Messages

23 Security in Web Applications

- Authentication and Authorization
- Securing Web Applications
- SSL Configuration

24 Web Application Deployment

- Packaging and Deploying Servlets and JSP
- Deployment Descriptors (web.xml)
- Deployment in Servlet Containers like Apache Tomcat

Core Java lays the groundwork for Java programming, covering essential concepts like syntax, data types, OOP, and basic I/O operations while Advanced Java focuses on server-side programming for building dynamic web applications. Mastering these topics enables developers to create interactive and scalable web applications using Java technologies.



PLACEMENT COMPANIES



Testimonials of Students



Sukhpreet Kaur

2 reviews

★★★★★ 2 weeks ago **NEW**

Hlo mam I'm Sukhpreet your Softcrayons tarining institute in student my training is digital marketing course 😊 I'm very becoz I'm digital marketing beginner but my experience to much becoz my trainer is very intelligent and supportive and nature is very friendly 😊



Manish Malik

1 review

★★★★★ 2 weeks ago **NEW**

I'm new student in softcrayons my starting classes all gud my softcrayons experience to much better becoz my trainer is very experienced



Aman Bhardwaj

2 reviews

★★★★★ 5 months ago

I am Aman Bhardwaj, Recently I completed a Digital Marketing course from Softcrayons. After completing my course I got a placement at SNVA Ventures with a good salary package. If you want to do a course and boost your career in the Digital Marketing field. I will recommend you visit Softcrayons. If I talk about the environment and faculty then Softcrayons have a very good and friendly environment and their faculty is highly experienced in the Digital Marketing field. Specifically, Yashvant sir is one of the best trainer and they have great experience in the Digital Marketing field. Thank you Softcrayons and all staff who helped me boost my career in the Digital Marketing field.



Shivam Sharma

1 review

★★★★★ 2 months ago

I got the chance to study with the best teacher and they provided me a good career guidance. a veryb great place to learn programing and start your career.



Lalita Tiwari

1 review

★★★★★ 5 months ago

I hearded about softcrayons through friends and I enroll myself here, and done my course. I suggest you all to join softcrayons. Hope you do great.



Tanish Chandrawal

5 reviews

★★★★★ 5 months ago

It is good institute, practical oriented practice is very good. This institute is very useful for graduate students to make carrier in IT. 100% job guarantee is available for all students. Very good Institute for Cloud Computing like Azure, AWS, GCP.



Aman Vishwakarma

2 reviews

★★★★★ 2 months ago

Hie guys I'm aman softcrayons institute students for AutoCAD.. softcrayons institute is best training institute sarfaraz sir is best teacher for softcrayons. And best institute softcrayons



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