



Core + Advanced Java



Core+ Adv. Java

About Us

Edustrom is an initiative of CSK Technologies OPC Pvt. Ltd, established in the year 2015 , headquartered at Delhi, The main activity of Edustrom is providing training on Information Technology, which is delivered to its audience all over the Country via Computer Based Training Programs, Onsite Training Programs and Company Owned learning centers. We are a fast growing group of Individual ,expertise in IT Training & Placement.

Our Aim

We aim to impart practical knowledge on Laravel to the budding technical workforce of the country. As we know that Designing and Development of Web Applications is the need of the day, and people with such skills are very much in demand. We moto to bridge the demand and supply gap of Professional C Programmers.

Achievements

- Trained more than 350 Students in Delhi only.
- Having Classroom Training Locations and Presence Across Delhi.
- In a short span of time we reached to more than 20 corporate clients across Delhi
- Conducted Training Programs for many Premier Institutes.

Course Content

➤ About Course

This course has been prepared for the beginners to help them understand the basic to advanced concepts related to Core Java Programming language. Before you start practicing various types of examples given in this reference, we assume that you are already aware about computer programs and computer programming languages.

| Syllabus

Basics of Java

Learning Objective: In this module you will learn about the usage of Core Java

Topics:

- Java - What, Where and Why?
 - History and Features of Java
 - Internals of Java Program
 - Difference between JDK,JRE and JVM
 - Internal Details of JVM
 - Variable and Data Type
 - Unicode System
 - Naming Convention
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OOPS Concepts

Topics:

- Advantage of OOPs
- Object and Class
- Method Overloading
- Constructor
- static variable, method and block
- this keyword
- Inheritance (IS-A)
- Aggregation and Composition(HAS-A)
- Method Overriding
- Covariant Return Type
- super keyword
- Instance Initializer block
- final keyword
- Runtime Polymorphism
- static and Dynamic binding
- Abstract class and Interface
- Downcasting with instanceof operator
- Package and Access Modifiers
- Encapsulation
- Object class
- Object Cloning
- Java Array
- Call By Value and Call By Reference
- strictfp keyword
- Creating API Document

String Handling

Topics:

- String : What and Why?
 - Immutable String
 - String Comparison
 - String Concatenation
 - Substring
 - Methods of String class
 - StringBuffer class
 - StringBuilder class
 - Creating Immutable class
 - toString method
 - StringTokenizer class
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Exception Handling

Topics:

- Exception Handling : What and Why?
- try and catch block
- Multiple catch block
- Nested try
- finally block
- throw keyword
- Exception Propagation
- throws keyword
- Exception Handling with Method Overriding
- Custom Exception

Nested Classes

Topics:

- Nested Class : What and Why?
- Member Inner class
- Anonymous Inner class
- Local Inner class
- static nested class
- Nested Interface

Multithreading

Topics:

- Multithreading : What and Why?
 - Life Cycle of a Thread
 - Creating Thread
 - Thread Scheduler
 - Sleeping a thread
 - Joining a thread
 - Thread Priority
 - Daemon Thread
 - Thread Pooling
 - Thread Group
 - ShutdownHook
 - Performing multiple task by multiple thread
 - Garbage Collection
 - Runnable class
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Synchronization

Topics:

- Synchronization : What and Why?
- synchronized method
- synchronized block
- static synchronization
- Deadlock
- Inter-thread Communication
- Interrupting Thread

Input and output

Topics:

- FileOutputStream & FileInputStream
- ByteArrayOutputStream
- SequenceInputStream
- BufferedOutputStream & BufferedInputStream
- FileWriter & FileReader
- CharArrayWriter
- Input from keyboard by InputStreamReader
- Input from keyboard by Console
- Input from keyboard by Scanner
- PrintStream class
- PrintWriter class
- Compressing and Uncompressing File
- Reading and Writing data simultaneously
- DataInputStream and DataOutputStream
- StreamTokenizer class
- Reading & displaying elements
- Two dimensional arrays

Serialization

Topics:

- Serialization & Deserialization
- Serialization with IS-A and Has-A
- transient keyword

Networking

Topics:

- Socket Programming
- URL class
- Displaying data of a web page
- InetAddress class

AWT and EventHandling

Topics:

- AWT Controls
- Event Handling by 3 ways
- Event classes and Listener Interfaces
- Adapter classes
- Creating Games and Applications

Swing

Topics:

- Basics of Swing
- JButton class
- JRadioButton class
- JTextArea class
- JComboBox class
- JTable class
- JColorChooser class
- JProgressBar class
- JSlider class
- Digital Watch
- Graphics in swing
- Displaying Image
- Edit Menu for Notepad
- Open Dialog Box
- Creating Notepad
- Creating Games and applications

LayoutManagers

Topics:

- BorderLayout
 - GridLayout
 - FlowLayout
 - BoxLayout
 - CardLayout
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Applet

Topics:

- Life Cycle of Applet
- Graphics in Applet
- Displaying image in Applet
- Animation in Applet
- EventHandling in Applet
- JApplet class
- Painting in Applet
- Digital Clock in Applet
- Analog Clock in Applet
- Parameter in Applet
- Applet Communication
- Creating Games

Reflection API

Topics:

- Reflection API
- newInstance() & Determining the class object
- javap tool
- creating javap tool
- creating appletviewer
- Accessing private method from outside the class

Collection

Topics:

- Collection Framework
 - ArrayList class
 - LinkedList class
 - ListIterator interface
 - HashSet class
 - LinkedHashSet class
 - TreeSet class
 - PriorityQueue class
 - ArrayDeque class
 - Map interface
 - HashMap class
 - LinkedHashMap class
 - TreeMap class
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- Hashtable class
- Comparable and Comparator
- Properties class

JDBC

Topics:

- JDBC Drivers
- Steps to connect to the database
- Connectivity with Oracle
- Connectivity with MySQL
- Connectivity with Access without DSN
- DriverManager
- Connection interface
- Statement interface
- ResultSet interface
- PreparedStatement
- ResultSetMetaData
- DatabaseMetaData
- Storing image
- Retrieving image
- Storing file
- Retrieving file
- Stored procedures and functions
- Transaction Management
- Batch Processing
- JDBC New Features
- Mini Project

Java New Features

Topics:

- Assertion
- For-each loop
- Varargs
- Static Import
- Autoboxing and
- Unboxing
- Enum Type
- Annotation
- etc.

Internationalization

Topics:

- Internationalization
- ResourceBundle class
- I18N with Date
- I18N with Time
- I18N with Number
- I18N with Currency

Basics of Servlet

Learning Objective: In this module you will learn about the usage of Advance Java

Topics:

- Servlet: What and Why?
- Basics of Web
- Servlet API
- Servlet Interface
- GenericServlet
- HttpServlet
- Servlet Life Cycle
- Working with Apache Tomcat Server
- Steps to create a servlet in Tomcat
- How servlet works?
- servlet in Myeclipse
- servlet in Eclipse
- servlet in Netbeans

ServletRequest

Topics:

- ServletRequest methods
- Registration example with DB

Servlet Collaboration

Topics:

- RequestDispatcher
 - sendRedirect
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ServletConfig

Topics:

- ServletConfig methods
- ServletConfig example

ServletContext

Topics:

- ServletContext methods
- ServletContext example

Attribute

Topics:

- How to set, get and remove example?

Session Tracking

Topics:

- Cookies
- Hidden Form Field
- URL Rewriting
- HttpSession

Event and Listener

Filter

Topics:

- Filter
- Authentication Filter
- FilterConfig
- Useful examples

ServletInputStream and ServletOutputStream

Annotation Servlet



Project Development

JSP

Basics of JSP

Topics:

- Life cycle of JSP
- JSP API
- JSP in Eclipse and other IDE's

Scripting elements

Topics:

- scriptlet tag
- expression tag
- declaration tag

9 Implicit Objects

Topics:

- out
- request
- response
- config
- application
- session
- pageContext
- page
- exception

Directive Elements

Topics:

- page directive
- include directive
- taglib directive

Exception Handling

Action Elements

Topics:

- jsp:forward
- jsp:include
- Bean class
- jsp:useBean
- jsp:setProperty & jsp:getProperty
- Displaying applet in JSP

Expression Language

MVC in JSP

JSTL

Custom tags

Topics:

- Custom Tag : What and Why?
- Custom Tag API?
- Custom Tag Example
- Attributes
- Iteration
- Custom URI

Project Development in JSP

JavaMail API

- Sending Email
- Sending email through Gmail server
- Receiving Email
- Sending HTML content

Design Pattern

Topics:

- Singleton
 - DAO
 - DTO
 - MVC
 - Front Controller
 - Factory Method
 - etc.
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JUnit

Topics:

- JUnit: What and Why?
- Types of Testing
- Annotations used in JUnit
- Assert class
- Test Cases

Maven

Topics:

- Maven: What and Why?
- Ant Vs Maven
- How to install Maven?
- Maven Repository
- Understanding pom.xml
- Maven Example
- Maven Web App Example
- Maven using Eclipse

Basics of Struts2

Topics:

- Struts : What and Why?
- Model1 vs Model2
- Struts2 Features
- Steps to create Struts2 application
- Understanding Action class
- Understanding struts.xml file
- Struts2 in Eclipse IDE
- Struts2 in Myeclipse IDE

Core Components

Topics:

- Interceptors
 - ValueStack
 - ActionContext
 - ActionInvocation
 - OGNL
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Struts 2 Architecture

Struts2 Action

Topics:

- Action Interface
- ActionSupport class

Struts2 Configuration

Topics:

- multi configuration
- multi namespace

Interceptors

Topics:

- Custom Interceptor : Life Cycle of Interceptor
- params interceptor
- execAndWait interceptor
- prepare interceptor
- modelDriven interceptor
- exception interceptor
- fileUpload interceptor

Struts 2 Validation

Topics:

- Custom Validation : workflow interceptor
- Input Validation : validation interceptor
- Ajax Validation : jsonValidation interceptor

Aware Interfaces

Topics:

- ServletActionContext
 - SessionAware
 - Login and Logout Application
 - ServletContextAware
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Struts2 with I18N

Zero Configuration

Topics:

- By convention
- By annotation

Struts2 with Tiles2

Hibernate with Struts2

Spring with Struts2

Project Development in Struts2

Working with IDE

IDE

Topics:

- Eclipse IDE
- Netbeans IDE
- Myeclipse IDE

Servers

- Apache Tomcat
- Glassfish Server
- JBoss Server
- Weblogic Server

EJB 3

Introduction to JavaEE

Topics:

- The Need for JavaEE.
- Overview on the JavaEE
- Architecture
- 1 tier
- 2 tier
- 3 tier
- N tier
- JavaEE Key Standards

Introduction to EJB3

- The EJB Model
- Key Services of the Application Server

Developing Session Beans

Topics:

- Stateless Session Beans
- Stateful Session Beans
- Packaging
- Writing Clients

Using Dependency Injection

Topics:

- No More JNDI
- Injection of EJBContext

JMS

Topics:

- JMS Overview
- JMS Messaging Domains
- Example of JMS using Queue
- Example of JMS using Topic

Message Driven Beans

Persistence Introduction to JPA

Topics:

- Object Relational Mapping
- Mapping configurations
- Embedded Objects
- EJBQL

Web Technology

HTML 5

Topics:

- Introduction to HTML
- HTML Tags
- Creating Forms
- Creating tables
- Managing home page

CSS

Topics:

- Introduction to CSS
- Three ways to use CSS
- CSS Properties
- Designing website
- Working with Templates

Javascript

Topics:

- Introduction to Javascript
- Three ways to use Javascript
- Working with events
- Client-side Validation

JQuery

Topics:

- Introduction to JQuery
 - Validation using JQuery
 - JQuery Forms
 - JQuery Examples
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AJAX

Topics:

- Introduction to AJAX
- Servlet and JSP with AJAX
- Interacting with database

Core Java Syllabus

Spring Syllabus

Hibernate Syllabus

➤ Our Training Approach

We are not limited to any number of classes or day to complete the whole course, so basically time duration depends on batch strength and their learning skills. However the average course duration is 2.5 months.

Training Features

- Course proceeds as per student learning skills and catching power.
 - Course repeat facility for all students for FREE.
 - Theory and Practical classes held with every session.
 - Per class 1-2 hours session.
 - Students will be given adequate time to revise and practice the concepts learned in class.
 - This Training Program covers Presentations, Real life Case Studies, Extensive Live Practical Demonstrations. An Experienced Faculty with a minimum experience of 3 Years will be available to provide you training and in order to help you start a career in Web Development.
 - In this training program, students will get Assignments & Practicals as homework which will help them to explore the already learned concepts & to guide them towards a path for research and development on each domain
 - Focused on practical solutions to real-world development problems.
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Why Edustrom ??

- We have been in the training sector for last 3 years
- Fastest growing in Delhi for IT training and placement.
- Course repeat facility for all students for FREE.
- No Complain from students and companies so far.
- We are honest with our training and placement commitment.
- We have our own IT Job portal.
- We have more than 55 IT Companies registered with us.
- And 250/350 around programmers have been placed by us.

Job Opportunities

- Web Developer
- Software Developer
- Online Application Engineer
- PHP/MySQL Coder
- Work as a Freelancer
- Mobile Application Developer

Course Fee

Amount: Rs.13000

Course Duration: 4 months

Note: Students are required to bring their Laptop for Practical Classes.

Our Other Courses



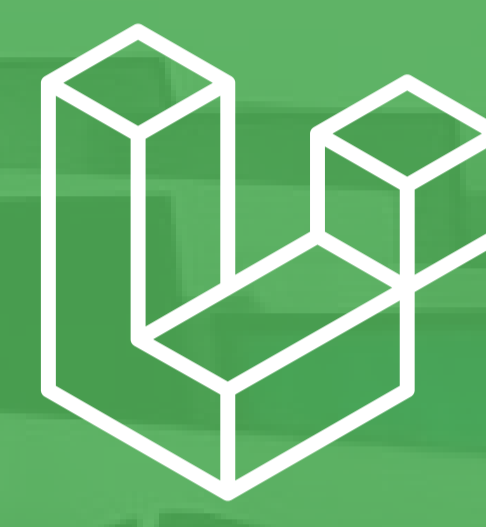
Graphic Design



Web Design



My SQL



Laravel



Java

php

PHP



iOS



Digital Marketing

Contact Us



Address

2nd Floor, HC Building,
Sahyogi Marg, Exhibition Road
Patna-800001(Bihar)



Website

www.edustrom.com



Phone

+91- 9631023421