

ActiveNET

#202, Manjeera Plaza, Ameerpet,
HYDERABAD – 500038 9848111288
www.activenetinformatics.com
activesurya@gmail.com

Complete Java

(FULL STACK JAVA DEVELOPER CURRICULUM
WITH ESSENTIAL UI TECH & ORACLE FREE)

BY MR. SURYANARAYANA

20 Years Experience

Brand you can always trust

Core Java

Introduction to Java & its features, Java Software Installation, Setting-Up Environment Variables, Hello Program, Identifiers, Literals, Keywords, Comments, Compiler & Interpreter Functioning, Byte-Code, Class Format Explanation, Data types, Variable declaration & Initialization, Type Conversion using typecasting & wrapper classes - (Byte, Short, Integer, Long, Float, Double, Character, Boolean), String, StringBuffer, StringBuilder & RegExpressions, Operators - (Arithmetic, Assignment, Postfix/Prefix, Logical, Relational, Ternary, Bitwise & Shift Operators), Conditions (Simple, If, If-Else, If-Else-If-Else, Nested-If, Switch Conditions), Loops (Finite For Loop, Indefinite Loop, Infinite Loop, Enhanced For-Loop, While-Loop, Do-While Loop), Arrays - (One, Two, Three Dimensional Arrays)

Java Programming Structure & importance (package, import, class, variable, constructor, method, static, non-static block declarations), access specifiers (private, default, protected, public), access modifiers (abstract, final, static, transient, volatile, native, synchronized)

OOPs (Encapsulation, Abstraction - Runtime Polymorphism Importance, Inheritance (Types of classes - interface, abstract class, class, final class, inner class, anonymous class enum), Polymorphism (Method overloading & Method overriding), Message Passing - (Pass-by-value & Pass-by-Reference)

Exceptions and Exception Handling (throw, throws, try, catch, finally clauses), Compile time Errors, Runtime Errors, CheckedExceptions, Unchecked Exceptions, User defined Exceptions

Multithreading - Sequential, Simultaneous & Synchronization Thread execution, Naming & Accessing Threads, Prioritizing Threads, Other Thread functions - (suspend() resume(), stop(), interrupt(), yield(), join(), wait(), notify(), notifyAll()), Writing Threads using "extending from Thread class", Writing Threads using "implementing from Runnable interface", Implementing Threads using Anonymous class, Method Synchronization, Object Synchronization, Class Synchronization

IOStreams - (InputStream, OutputStream, Reader, Writer and its sub classes), Reading stream of bytes Reading stream of Characters, Reading byte-by-byte, char-char-, line-line, buffer-buffer

Networking - (URL, URLConnection, HttpURLConnection, InetAddress, TCP/IP Protocol implementation using Socket & ServerSocket, UDP Protocol implementing using DatagramSocket & DatagramPacket)

Java.util package classes - Legacy classes - Vector, Stack, Dictionary, Hashtable, Properties classes & Enumeration interface, Collection classes - Collection interface, AbstractCollection, List, ArrayList, AbstractList, AbstractSequentialList, LinkedList, Set, AbstractSet, HashSet, LinkedHashSet, NavigableSet, SortedSet, TreeSet, Map, AbstractMap, HashMap, LinkedHashMap, NavigableMap, SortedMap, TreeMap, Comparable & Comparator, Iterator, ListIterator, Misc classes - Date, Calendar, GregorianCalendar, Scheduler using - Timer, TimerTask, I18N using - Locale, ResourceBundle, Collections class Arrays, Currency, Formatter, Scanner.

Oracle

RDBMS Introduction, CODD rules, Normalization Example, SQL data types, Table, View, Synonym, Index, Sequence, DDL (CREATE, ALTER, DROP), DML (INSERT, UPDATE, DELETE), DRL (Complete SELECT clause), PL/SQL, Anonymous PL/SQL block, PL/SQL data types, Control structures in PL/SQL (writing loops, conditions), Handling TXs, Functions, Procedures, Packages, triggers, Cursors.

Web Technology

HTML - HTML Document Elements, Container Elements (Block Level Element & Inline Elements), Difference between applying attributes on HTML tags and separating styles using inline, internal and external style sheets using Tag, ID, CLASS selectors, Heading Elements, Text Formatting Elements, Image Elements, Anchor Elements, FRAMESET & FRAME Elements, Menu Elements (Ordered/Unordered Elements), Table Elements, Formatting Layout with <P>, <DIV>, and Elements, FORM Elements.

CSS - CSS Introduction, CSS Syntax, CSS Selectors, CSS Backgrounds, CSS Text, CSS Fonts, CSS Links, CSS Lists, CSS Tables, CSS Box Model, CSS Border, CSS Outline, CSS Margin, CSS Padding, CSS Dimension, CSS Display, CSS Max-width, CSS Position, CSS Float, CSS Inline-block, CSS align, CSS Pseudo classes, CSS Pseudo Element, CSS Navigation Bar, CSS Image Gallery, Image Opacity, CSS Image Sprites, CSS Attribute Selectors.

JavaScript - Importance of JavaScript, Difference between Object Oriented and Object Based Programming Languages, Creation of JavaScript Code, Var Declarations, Conditions, Loops, Data type Conversions, Operators, Writing and Accessing Functions JavaScript supporting Events, JavaScript Objects, onLoad, onUnload, onAbort, onFocus, onBlur, onChange, onSelect, onClick, onSubmit, onMouseOver, onMouseOut, onMouseDown, onMouseUp, onMouseClick, onKeyPress, onKeyDown, onKeyUp, Window, Window.document.getElementById(), getElementsByTagName(), getElementByName(), String, Date, Math, Number, Array, Boolean, RegExp, XMLHttpRequest and ActiveXObject, How to access HTML elements in JavaScript using hierarchical way and selector way, How to manipulate HTML elements using HTML DOM, How to make AJAX call, get the XML or JSON output and read it using XML DOM and JSON Parser, HTML FORM validations using JavaScript.

Adv Java

JDBC (15 days)

DB Connectivity architecture, JDBC 4 Drivers Architecture (Type I - JDBC-ODBC Driver, Type II - Java-Native API Driver, Type III - All Java Net Driver/Network Protocol Driver, Type IV - Java Native Protocol Driver), JDBC Interfaces - Driver, Connection, Statement, PreparedStatement, CallableStatement, ResultSet 1,2,3, ResultSetMetaData, DatabaseMetaData, Executing DDL Statements

(CREATE TABLE, ALTER TABLE, DROP TABLE) using Statement object, Executing DML Statements (INSERT, UPDATE, DELETE) using Statement object, Executing DML Statements (INSERT, UPDATE, DELETE) using PreparedStatement object, How Statement execution performances is lower than PreparedStatement/How PreparedStatement improves SQL Statement performance, Executing DRL Statements (SELECT) using Statement & ResultSet object, Creating Function and Procedure in Oracle Database, Calling database Function using CallableStatement, Calling database Procedure using CallableStatement, Passing IN, OUT and INOUT Parameters, Limitations of JDBC 1.0 ResultSet, JDBC 2.0 ResultSet (Scrollable, Sensitive, Updatable), JDBC 3.0 ResultSet aka RowSet (JdbcRowSet, CachedRowSet, WebRowSet, FilterRowSet, JoinRowSet), Savepoint creation in DB, Calling Savepoint from JDBC, TX Management & ACID Properties (Achieving Atomicity in JDBC using setAutoCommit() & commit() statements, How Batch updation improves JDBC performance, What are DB inconsistent problem?, Dirty Read, Non-Repeatable Read, Phantom Read, How to avoid above inconsistent problems? Using Isolation Levels (TRANSACTION_NONE, TRANSACTION_READ_UNCOMMITTED, TRANSACTION_READ_COMMITTED, TRANSACTION_REPEATABLE_READ, TRANSACTION_SERIALIZABLE

Servlets (25 days)

Introduction to Web Server & Web Application, Tomcat Installation, Hello Program, Passing Request, Init & Context Parameters, Servlet Lifecycle explanation, Singleton-Multithreaded/Single-threaded Execution, Session management & Client State Persistence using Cookies, URL Rewriting & Hidden Fields, Inter-Servlet communication using response, sendRedirect(), RequestDispatcher.forward() & include(), Filters & Listeners.

JSP – Java Server Pages (15 days)

Static web document Vs Dynamic web document, How JSP becomes a dynamic web document, Sample Hello Program, Explain how .jsp extension document is converted into servlet/PIC (Page Implementation Class), SP PIC class hierarchy, JSP Lifecycle methods (jspInit(), _jspService(), jspDestroy()), JSP Lifecycle phases (Verification, Validation, Translation, Compilation, Configuration, Instantiation, Initialization, Execution and Destruction), JSP 9 Implicit object (application, page, config, request, response, session, out, exception, pageContext), 4 Scope variables (page scope, request scope, session scope, application scope), 4 Scripting Elements (JSP Comment, JSP Declaration Tag, JSP Expression Tag, Scriptlet), 3 Directive Elements (<%@ page %>, <%include %>, <%taglib%>), 9 Standard Action Element (<jsp:include>, <jsp:forward>, <jsp:useBean>, <jsp:setProperty>, <jsp:getProperty>, <jsp:plugin>, <jsp:params>, <jsp:param>, <jsp:fallback>), Custom Tags (Empty Custom Tag Demo, Custom Tag Implementation also called as Tag Implementation Class, TIC Lifecycle, How pageContext object is passed into PIC and makes JSP PIC implicit objects available to TIC, Implementing Nested Tags, Implementing Text Only Tag)

JSTL – JSP Standard tag Library (5 days)

JSTL Introduction, How to download and include JSTL Tag Libraries into our project, JSTL Tag Libraries – Core Tag Library (<c:set>, <c:get>, <c:remove>, <c:if>, <c:choose>, <c:when>, <c:otherwise>, <c:forEach>, <c:forTokens>, <c:import>, <c:redirect>, <c:url>, <c:catch>), SQL Tag Library (<sql:setDataSource>, <sql:transaction>, <sql:update>, <sql:param>, <sql:dateParam>, <sql:query>), XML Tag Library (<x:out>, <x:parse>, <x:set>, <x:if>, <x:forEach>, <x:choose>, <x:when>, <x:otherwise>, <x:transform>, <x:parse>), Formatting Tag Library (<fmt:formatNumber>, <fmt:parseNumber>, <fmt:formatDate>, <fmt:parseDate>, <fmt:bundle>, <fmt:setLocale>, <fmt:timeZone>, <fmt:setTimeZone>, <fmt:message>, <fmt:requestEncoding>), How to include JSTL Tag Libraries namespace into JSP document and create a prefix to namespace, How JSTL tags are called with namespace prefix. All JSTL Tag Library examples.

Hibernate (15 days)

Introduction to ORM, ORM Tools, ORM/Hibernate Features, ORM relationships – IS-A relations (TPC, TPSC, TPCC, HAS-A relations (OTMTO with List, Set & Bag, MToM with Set and Map, OTO, Criteria, Criterion, Projections & Restrictions, TX management, Applying isolation levels to avoid inconsistency, Lazy & Eager Loading, Memory & Disk-level Cache, Connection Pooling)

Spring (25 days)

Introduction to Spring, Spring in Standalone and Enterprise Applications, Various MVC Architectures (MVC1, MVC2, JSP Model 1,2,3,4), Ioc importance with Runtime Polymorphism, Constructor and Setter Injection, Connection Pooling, Eager & Lazy loading Containers, AOP (Aspect, Advice, Joinpoint, Pointcut, AOP Container, AOP Proxies), JDBC DAO Support, ORM DAO Support, Spring Web MVC Module (Controller, SimpleFormController, MultiActionController), Spring Web Module (Integration with Struts & JSF), Spring Context Module (RMI, JMS, Quartz Services, I18N - Internationalization), Securing Spring Components.

XML & Web Services (SOAP, RESTful, JSON) – 10 days

XML Introduction, Well-formed, Valid Documents, DTD, Schema, Validating Parsers – DOM & SAX, Web Services Architecture, Building, Deploying & Consuming SOAP Web Services using JAX-RPC, Document & RPC communication style differences, RESTful WebService development using JAX-RS (Path Param, Query Param, Matrix Param, Form Param, File upload, File download).

Highlights of ActiveNET Institute:

- Courses we are offering are:
 - Complete Java, Complete .net, Python, Android, Selenium, Oracle SQL, PL/SQL
 - HTML Stack/Complete UI Stack (HTML, CSS, JavaScript, HTML5, CSS3, jQuery, Bootstrap, AngularJS, Angular 2,4,5,6, Node.js, Express.js, MongoDB, ReactJS, VueJS, RxJS, Backbone.js, Knockout.js)
 - AWS (Amazon Web Service),
 - DevOps (Nagios, Monit, ELK - Elastic Search, Logstash, Kibana, Consul.io, Jenkins, Docker, Ansible, Collectd, GitHib, Puppet, Chef, Splunk)
- Completely Classroom, Practical Oriented & Project Oriented Java Training
- Highly Experienced Faculty
- Minimum 3 Projects during Course
- Convenient batches for Regular, Fast track, Online, Weekend Workshops
- Complete SDLC will be covered (SDLC – UML, Agile, Scrum, TDD (Test Driven Development), CODD Rules, DB Normalization, DB Design, Use Case Diagrams, State-Chart Diagrams, Activity Diagrams, Object Diagrams, Sequence Diagrams, Collaboration Diagrams, Class Diagrams, Component Diagrams, Deployment Diagrams, LLD, HLDD , BRD), Complete Project Documentation, Agile Methodology, Scrum, TDD (Test Driven Development)
- IDEs: Eclipse, NetBeans, Oracle Developer, IBM RAD/WSAD/RSA, Dreamweaver, Microsoft Expression Web, IntelliJ, Visual Studio, Aptana Studio
- Course Material both Softcopy, Hard Copy, Examples are provided to Students
- This Complete Java curriculum is perfectly suitable for Android, Hadoop, Salesforce, Cloud Computing, Testing Tools, Selenium, Automation Testing, Oracle Fusion Middle Ware, SOA, CMS, SFA (Sales Force Automation), HRM, ERP, CRM, SCM
- If you want to become “Successful Software Professional” then join immediately in ActiveNET.
- Finally ActiveNET training means 100% Job Guarantee.