

# ActiveNET

#202, Manjeera Plaza, Ameerpet,  
HYDERABAD – 500038 9848111288  
www.activenetinformatics.com  
netactive74@gmail.com, activesurya@gmail.com

## Complete Java, Complete Web Technology & Oracle

(Full Stack Java & Web Developer Curriculum)

*By Mr. Suryanarayana*

**Duration:**

**Fee:**

**Time:**

### Core Java

Introduction to Java & its features, Java Software installation, Environment Variables Setting, 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, String, StringBuffer, StringBuilder & RegExpr, Operators, Conditions, Loops, Arrays, Java Programming Structure & importance (package, import, class, variable, constructor, method, static, non-static block declarations), access specifiers (private, default, protected, public), 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), Polymorphism (Method overloading, Method overriding), Pass-by-value, Pass-by-Reference), Exceptions and Exception Handling (throw, throws, try, catch, finally clauses), Multithreading, Thread Synchronization, IOStreams (InputStream, OutputStream Reader, Writer and its sub classes), Networking, Legacy classes, Collection classes & Misc classes.

### Full Stack 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 <SPAN> 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 XMLHttpRequest, 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.

**HTML5** - Difference between Semantic and Non-Semantic Elements, HTML5 New Elements (semantic elements - <header>,<footer>, <article>, <section>, <aside>, <details>, <figcaption>, <figure>, <main>, <mark>, <nav>, <summary>, <time>, control attributes - number,

date, time, calendar, range, graphic elements - <svg>, <canvas>, multimedia elements - <audio> and <video>), HTML5 API (Geo, Drag and Drop, Local Storage, Application Cache, Web Socket, SSE)

**CSS3** - CSS3 Modules (Selectors, Box Model, Backgrounds and Borders, Image Values and Replace Content, Text Effects, 2D/3D Transformations, Animations, Multiple Columns, User Interface, Rounded Corners, Border Images, Backgrounds, Colors, Gradients, Shadows, Text, Box Sizing, Flexbox, Media Queries, Responsive Web Designing, Web Safe Fonts.

**jQuery** - jQuery Introduction (Intro, Syntax, Selectors, Events), jQuery Effects (hide(), show(), slide(), animate(), stop(), callback(), chaining), jQuery HTML (get(), set(), add(), append(), prepend(), remove(), css(), dimensions), jQuery Traversing (traversing, ancestors, descendants, siblings, filtering), jQuery AJAX (load(), get(), post())

**Bootstrap** - What is Bootstrap? Bootstrap History. Why use Bootstrap? How to install Bootstrap? Bootstrap Grids (Bootstrap Grid System, Grid Classes, Basic Structure of Bootstrap Grid, Equal, Unequal columns, Bootstrap Typography (Default Settings, <h1> - <h6>, <small>, <mark>, <abbr>, <blockquote>, <dl>, <code>, <kbd>, <pre>, Context Colors & Backgrounds, More Typography Classes), Bootstrap Tables (Basic Table, Striped Rows, Bordered Table, Hover Rows, Condensed Table, Contextual Classes, Responsive Tables), Bootstrap Images (Rounded Corners, Circle, Thumbnail, Responsive Images, Image Gallery, Responsive Embeds), Bootstrap Jumbotron and Page Headers (Creating Jumbotron, Inside Container, Outside Container, Page Header), Bootstrap Wells, Alerts, Buttons, Button Groups, Glyphicons, Badges/Labels, Progress Bars, Pagination, Pager, List Groups, Panels, Dropdowns, Collapse, Tabs/Pills, Navbar, Forms, Inputs, Inputs2, Input Sizing, Carousel, Modal, Tooltip, Popover, Scrollspy, Affix, Bootstrap Themes (Templates, Simply Theme, Company Theme, Band Theme)

**AngularJS** - Angular Introduction (How to install, Basic Page, Comparing JavaScript with AngularJS, Directive, Expression, Module, Controller), Angular Expression, Directives, Controllers, Filters, #http/AJAX, Tables, SQL, DOM, Events, Modules, Forms, Validation, Angular API (Comparing Objects, Iterating Objects, Converting Data), AngularJS with Twitter Bootstrap, Page Includes, Routers in a SPA, Calling RESTful Service & consuming JSON Formats.

## 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

## Adv Java

**JDBC** - DB Connectivity architecture, JDBC 4 Drivers Introduction, Driver, Connection, Statement, PreparedStatement, CallableStatement, ResultSet 1,2,3, ResultSetMetaData, DatabaseMetaData, ACID Properties & TX Management)

**Servlets** (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 - Scripting Elements, Directive Elements, Standard Action Element, Custom Tags

JSTL - Core Tag Library, JDBC Tag Library, XML Tag Library, Formatting TagLibraries

## Hibernate

Introduction to ORM, ORM Tools, ORM/Hibernate Features, ORM relationships - IS-A relations (TPC, TPSC, TPCC, HAS-A relations (OTMTO with List, Set & Bag, MTO 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

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)

XML Introduction, Well-formed, Valid Documents, DTD, Schema, Validating Parsers - DOM & SAX, Web Services Architecture, Building, Deploying & Consuming SOAP WebServices 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).

☺☺☺ Good Day, Best of Luck ☺☺☺