



JAVA FULL STACK



The Best Training Institute in Hyderabad



Java-J2SE&J2EE Syllabus

Core Java:

- Flow Control, Source file
- Object Oriented Programming
- Class, Object, Data types
- Comments, Setup
- Instance & Static variables
- Constructor
- This keyword
- Method
- Instance & Static Methods
- Static block
- Instance block
- Method overloading
- Inheritance
- Extending classes
- Method overriding
- Final class
- Abstract class
- Interface
- Abstract class vs. Interface



- Access Specifiers
- Packages
- Garbage Collection
- Exception handling
- Assertions
- Collections
- Generics, Enums, Covariant return types
- Auto Boxing, Annotations
- Java Full Stack
- Internationalization, Locale, Formatting text and dates
- Multi Threading
- JDBC
- Connection pooling

Advance Java:

- Web applications and HTTP basics
- Servlets
- Servlet model
- Servlet Life cycle
- Servlet container model
- Coordinating servlets / Information sharing
- Http servlet package
- Session management



- Filters
- Listeners
- Web applications security
- JSP(Java Server Pages)
- JSP Elements, Directives
- Declarations
- Scrip lets
- Expressions
- JSP Actions
- Comments
- Implicit objects
- Expression Language (EL)
- Model1 and Model2 Architectures:
 - o JSTL
 - o JNDI
- Resource Connections Data Source objects
- Connection pools
- JSP Elements
- Active users counting by listener
- Publish/Subscribe Messaging
- Design Patterns



Oracle/MySQL :

- Introduction to Database Server,
- Creating Database, Creating Tables, Relations.
- Manipulating data in SQL or T-SQL.
- Oracle/Mysql

Tools:

- Eclipse

Web Servers/Application Servers:

- Tomcat

Mongo dB :

- What is NoSQL
- Why NoSQL
- Benefits over RDBMS
- Types of NoSQL Databases
- Key/Values
- Datatypes
- Create and Drop Database
- Create and Drop Collection
- Create and Drop Documents



- Insert Documents
- Query Document
- Update Document
- Limit Records
- Sort Records

MYSQL :

DBMS

- Concepts of DBMS
- Introduction
- Importance and Need

Introduction to RDBMS

- Concepts of RDBMS
- Introduction
- Comparison with DBMS

Introduction to MySQL :

Structured Query Language

- Introduction to SQL
- Predefined Data Types
- Introduction to database Objects
- Table



Commands in SQL

- Data definition language (DDL)
- Data manipulation language (DML)
- Transaction control language (TCL)

Working with DRL

- Operators
- Arithmetical
- Logical
- Assignment
- SQL Operators
- Set Operators

Functions

- Date
- Number
- Character
- Group by, having clause
- Aggregate Functions
- Order By

Integrity Constraint

- Different Types of Integrity Constraint
- Use of Integrity constraint in table



Joins

- Usage of joins
- Different Types of joins
 - o Inner join, left ,right and cross join
 - o Outer join

Sub queries

- Need of sub queries
- Simple sub queries
- Co-related sub quires

Views

- Importance of views
- Creating, Drop views
- Working with database objects
- Index
- Distinct
- If null (Convert null to Zero)
- Limit
- Coalesce
- Derived Table
- Locks
- Using Temp Tables
- CTE



UI Development

Intro to Web App Development

- what is web / internet
- what is web site
- what is web page
- what is web browser
- what is web server
- what is web client
- what is web technology
- Client side web technologies (vs) server side web technologies

HTML 4

- Intro to html
- Syntax of html
- Creating simple web page using html
- Intro to html elements / html tags
- <html>, <body>
- <h1>, <h2>, <h3>, <h4>, <h5>, <h6>
- , <i>, <u>, , , <sup>, <sub>
- <abbr>, <bdo>, <article>
-
, , <a>
- <head>, <title>, <meta>
- , , , <dl>, <dt>, <dt>



- `<table>`, `<tr>`, `<td>`, `<th>`, `<caption>`
- `<div>`, `<span>`
- `<form>`, `<input>`, `<textarea>`Java Full Stack
- `<select>`, `<option>`, `<optgroup>`
- `<button>`, `<fieldset>`, `<legend>`, `<label>`
- `<iframe>`

HTML 5

- Intro to HTML 5
- Need of HTML 5 in real web sites
- Removed elements
- Remove attributes
- `<meter>`, `<progress>`, `<figure>`, `<figcaption>`
- `<details>`, `<summary>`
- `<datalist>`, `<output>`
- New input types
- New attributes of `<input>` tag
- `<audio>`, `<video>`
- LocalStorage, Session Storage
- `<header>`, `<nav>`, `<section>`, `<aside>`, `<footer>`
- Geo location
- App cache



- Web workers
- Server sent events
- Drag and drop
- Important canvas and SVG concepts

Responsive Web Design

- Intro to Page Template Development
- Header, nav, leftcol, page content, footer
- Intro to responsive web design
- Need of RWD in real web sites
- Extra-small, small, medium, large devices
- Media queries
- Targeting CSS file to various resolutions & HTML Entities

CSS 2.1

- Intro to CSS 2.1
- Need of CSS in real web sites
- Syntax of CSS
- Background properties
- Font properties
- Text properties
- Link properties
- List properties



- Box model (padding, margin, border)
- Display property
- Position property
- Overflow property
- Important CSS selectors
- Opacity
- Float
- Internal, inline, external styles

CSS 3

- Intro to CSS 3
- rgba
- Border radius
- Box shadow, text shadow
- Word wrap
- ResizeJava Full Stack
- Multiple columns
- Transitions
- Animations
- 2D Transformations
- Gradient colors
- Font face



Java Script

- Intro to JavaScript
- Need of JavaScript in real web sites
- Variables
- Operators
- Control statements
- Dialog boxes
- User-defined functions
- DOM manipulations
- Event handling
- Click, dblclick, focus, blur
- Mouse over, mouse out, mouse move
- Key up, keypress, change, on load
- Updating CSS using JavaScript
- Updating attributes using JavaScript
- Creating, removing elements
- Set interval, Set timeout
- Random
- External JavaScript
- Java Full Stack
- Validations using JavaScript
- String methods
- Date methods



jQuery

- Intro to jQuery
- Need of jQuery in real web sites
- Advantages of jQuery
- jQuery versions
- jQuery production vs development
- Downloading jQuery
- val, html, text
- Bind and Unbind
- Click, dblclick, focus, blur, change
- Mouse move, mouse over, mouse out
- Keypress, key up
- Disabling cut, copy, paste using jQuery
- Disabling right click using jQuery
- Filtering characters in a textbox using jQuery
- Fade in, fade out, fade to, fade toggle
- Show, hide, toggle
- Slide down, slide up, slide toggle
- jQuery chaining
- add Class, remove Class, toggle Class, has Class, css
- attr, removeAttr
- jQuery animations



- jQuery animations with easing effects
- Java Full Stack
- Important jQuery selectors and filters
- append, prepend, after, before
- Append To, prepend To, insert After, insert Before, clone
- Wrap, wrap All, empty, remove, replace With

JSON

- Intro to JSON
- JSON syntax
- Need of JSON in real web sites
- JSON object
- JSON array
- Complex JSON objects
- Reading JSON objects using jQuery

Bootstrap

- Introduction to Bootstrap
- Need of Bootstrap in real web sites
- Bootstrap First Example
- Bootstrap Lead
- Bootstrap Alignment



- Bootstrap Tables
- Bootstrap Buttons
- Bootstrap Glyph icons
- Bootstrap Show
- Bootstrap HiddenJava Full Stack
- Bootstrap Images
- Bootstrap Jumbo Tron
- Bootstrap Paging
- Bootstrap Panels
- Bootstrap Dropdown
- Bootstrap NavBar
- Bootstrap Breadcrumbs
- Bootstrap Progress Bar
- Bootstrap Modal Plugin
- Bootstrap Tabs Plugin
- Bootstrap Carousel Plugin
- Bootstrap Grid system (Responsive Web Design)
- Bootstrap Forms



CLOUD VISION TECHNOLOGIES

