

## **ABHISHYANDH GLOBAL SOLUTIONS**

Aditya Enclave, Nilgiri Block, 6th Floor, 605A,
Beside Ameerpet Metro Station, Ameerpet- Hyderabad.

1040-66858189 \$\incelow\$ 8897830910

https://abhishyandh.co.in info@abhishyandh.co.in



## **FULL STACK JAVA**

## **Java Full Stack Development Course**

Topics	Subtopics
1. Fundamentals of Java Programming	- Introduction to Java - Java Programming Basics (Syntax, Variables, Data Types) - Operators and Expressions - Control Flow Statements (If, Switch, Loops) - Arrays and Strings - Functions and Methods - Java Virtual Machine (JVM) Basics - JVM Architecture - Java Memory Management (Heap, Stack) - Garbage Collection
2. OOP Concepts	- Classes - Objects - Inheritance - Polymorphism - Encapsulation - Abstraction - Constructors - Interfaces
3. Core Java Concepts	- Exception Handling (Try, Catch, Finally, Throw, Throws) - Collections Framework (List, Set, Map) - Generics - File I/O (InputStream, OutputStream, FileReader, FileWriter) - Multithreading (Threads, Runnable, Synchronization) - Lambda Expressions and Streams (Java 8)
4. Advanced Java	- Reflection API - Annotations - Java 8 Features (Default Methods, Optional, Stream API)

Topics	Subtopics
	- Concurrency Utilities (ExecutorService, Future) - Networking (Sockets, URL) - Java Memory Management (Garbage Collection, JVM) - JDBC Concepts (JDBC Drivers, Connection, Statement, ResultSet, PreparedStatement, CallableStatement)
5. Serviets	<ul> <li>Introduction to Servlets</li> <li>Servlet Lifecycle</li> <li>Handling HTTP Requests and Responses</li> <li>ServletConfig and ServletContext</li> <li>Request Dispatching (RequestDispatcher)</li> <li>Session Management (Cookies, HttpSession)</li> <li>Error Handling and Exception Handling in Servlets</li> <li>Filters and Listeners</li> </ul>
6. JSP Concepts	- Introduction to JSP - JSP Lifecycle - JSP Syntax (Directives, Scriptlets, Expressions, Declarations) - JSP Implicit Objects - JSP Standard Tag Library (JSTL) - JSP Custom Tags - JSP and Servlets Integration
7. Spring Boot Framework	<ul> <li>Introduction to Spring Boot</li> <li>Spring Core (Dependency Injection, Inversion of Control)</li> <li>Spring MVC (Model-View-Controller)</li> <li>RESTful Web Services with Spring Boot</li> <li>Spring Data JPA (Database Integration)</li> <li>Spring Security (Authentication and Authorization)</li> <li>Spring Boot Actuator (Monitoring and Management)</li> </ul>
8. HTML	- Introduction to HTML - Basic HTML Tags (Headings, Paragraphs, Links, Lists) - HTML Forms and Input Elements - HTML5 Features (Canvas, Audio, Video) - Semantic HTML (Article, Section, Nav) - HTML Tables - HTML Media (Embedding Images, Audio, Video) - HTML Metadata (Meta Tags, SEO Basics) - HTML Links and Navigation - HTML Layouts (Div, Section, Header, Footer) - HTML Scripting (Embedding JavaScript) - HTML Best Practices (Accessibility, Performance)
9. CSS	- Introduction to CSS - CSS Selectors and Properties

Topics	Subtopics
	- Box Model (Margins, Borders, Padding)
	- Positioning (Static, Relative, Absolute, Fixed)
	- Flexbox and Grid Layouts
	- Responsive Design Techniques
	- CSS Transitions and Animations
	- Introduction to Bootstrap
	- Bootstrap Grid System
10. Bootstrap	- Bootstrap Components (Buttons, Cards, Navbars)
	- Bootstrap Utilities (Spacing, Colors, Borders)
	- Customizing Bootstrap Themes
11. JavaScript (JS)	- Introduction to JavaScript
	- Variables, Data Types, and Operators
	- Control Structures (If, Switch, Loops)
	- Functions and Scope
	- DOM Manipulation (Selecting Elements, Event Handling)
	- Asynchronous JavaScript (AJAX, Fetch API)
	- ES6 Features (Let, Const, Arrow Functions, Template Literals)
12. MySQL	- Intro <mark>du</mark> ction to MySQL
	- SQL B <mark>a</mark> sics (Se <mark>lect, I</mark> nsert, Update, Delete)
	- Joins (Inner J <mark>oin, Outer Join)</mark>
	- Subqueries and Nested Queries
	- Data Types and Constraints
	- Database Design (Normalization, Keys)
	- Indexing and Query Optimization
	- Transactions (Commit, Rollback)
	AMERICAL DEPLICATION