

CELEBRATING  
12 YEARS

QualityThought®



FULL STACK  
**Java**

*iHub Talents Core and advanced Java course is aligned to Industry standards developed by leading Java Experts. This course aims to make you master all the Core and Advanced level skills in the Java and various technologies involved in the field of Java*



**COURSE DURATION**  
**90 DAYS**

**SESSION HOURS**  
**180 HOURS**

## KEY HIGHLIGHTS

- Only EdTech with 100% Internship based and job guarantee training
- Institute backed by strong IIT alumina Team
- More than 10,000 + success stories created
- Partnered and serving 100+ clients right from the inception of the firm
- Parent company Quality Thought No #1 providing placements since 2010
- Experienced IT Architects, subject matter experts as advisory in the board
- Guaranteed Internship Opportunity (3 to 6Months) for every participant
- Backed by strong Internal human resource team enabling quick placements
- Special guidance to students to win jobs with highest packages

## TRAINING HIGHLIGHTS

- Industry ready course roaster designed by architects and subject matter experts
- Proven content, creating gateway to world of Job opportunities
- Practical & detailed approach, everyone can understand and perform to excel
- Subject matter experts as trainers
- Not just learning, Learn by doing methodology
- Access to Instant recorded live Class videos shared
- Personalized attention and guidance to accelerate the learning
- Member access to private group to get instant doubt clarifications
- Guest lectures from leading MNC Companies

## Core Java

### a) Basic Introduction of Java

- Programming Language
- Modules In Java
- History of Java
- Internal Architecture of JVM
- Naming Conventions
- Identifiers
- Reserved Words
- Data-types
- Types of variables
- var-arg method
- Main method
- System.out.println()
- Command line arguments
- Java Source File Structure
- Types of Blocks in Java
- Type casting in Java
- Fully Qualified Name
- Import Statements
- Control-Statements.
- Arrays.

### b) OOPS

- class
- object
- Data Hiding
- Abstraction
- Encapsulation
- Is-A relationship
- Has-A relationship
- Types of inheritance
- Method Overloading
- Method Overriding
- Method Hiding
- Polymorphism
- Constructors
- this keyword
- super keyword
- Interfaces
- Abstract classes
- Wrapper classes
- What is API?
- Packages
- Enum
- Inner classes
- String
- StringBuffer
- StringBuilder
- StringTokenizer



c) **Exception Handling**

- Exception vs Error
- Types of Terminations
- Exceptions Hierarchies
- try block
- catch block
- finally block
- throw statement
- throws statement
- custom exceptions in java

d) **java.io package**

- File
- FileWriter
- FileReader
- BufferedWriter
- BufferedReader
- PrintWriter
- Various ways to provide inputs

e) **Collections**

- What is Collection?
- List interface
- Set Interface
- Map interface
- Types of cursors in Java

f) **Multi-Threading**

- Thread vs Process
- Multi-Tasking
- Multi-Threading
- Ways to start a thread in java
- Setting and Getting name of a thread
- Thread priority
- Various methods to prevent a thread from execution
- Daemon Thread
- Synchronization
- Types of synchronization
- Inter-Thread communication
- DeadLock in Java

g) **Java 1.8 Features**

- Functional Interface
- Lamda Expression
- java.time package
- default and static methods in interface
- Stream API



## Oracle

### a) SQL

- Types of Data
- Introduction to Oracle
- Tables, DBMS, RDBMS
- DDL commands
- DML commands
- DRL commands
- DRL commands with where clause
- TCL commands
- DCL commands
- Operators in SQL
- Group by , Having and order by clause
- Integrity constraints
- Types of constraints
- Joins
- Sub Queries
- Sequences
- Synonyms
- Pseudo columns
- Indexes



### b) PL/SQL

- Introduction to PL/SQL
- Control statements in PL/SQL
- LOOPS in PL/SQL
- DML operations in PL/SQL
- DRL operations on PL/SQL
- Exception Handling
- Cursors
- Procedures
- Functions
- Packages
- Triggers



## Advanced Java

### a) JDBC

- Introduction to JDBC
- JDBC Drivers Architectures
- Files vs Database
- Connection object
- Types of Statement objects
- Types ResultSet objects
- Select query executions
- Non-select query executions
- Working with Date values
- Working with LOB values
- DatabaseMetadata
- ResultSetMetaData
- Batch Processing
- Transaction Management



### b) Servlets

- What is web application?
- What is web resource program?
- What is web container?
- Sample web application creation
- Types of url patterns
- MIME Types
- Types of Communications
- Servlet Filters
- Servlet Life cycle methods
- ServletConfig object
- ServletContext object
- Stateless Behavior of web application
- Session Tracking



### c) JSP

- Introduction to JSP
- JSP life cycle
- JSP Tags
- JSP to Database communication
- JSP to Java Bean communication
- JSP implicit objects
- JDBC Connection pooling
- JSP MVC Architecture
- Working with IDE's

### d) Servers

- Tomcat Server
- Web Logic Server

- e) **IDE's**
  - Eclipse
  - NetBeans
- f) **Real tools**
  - GIT/GITHUB
  - Maven/Gradle
  - Junit
- g) **SDLC**
  - What is SDLC
  - Types of phases in SDLC
- h) **Project**
  - Module 1
  - Module 2

## Java Framework: Spring Boot

- a) **Introduction**
  - Spring vs Spring Boot
  - Spring Modules overview
  - Spring MVC architecture
  - What is Spring Boot
  - Advantages of Spring Boot
  - Spring Boot Architecture
  - Spring Boot Application using Initializr
  - Spring Boot Application using STS IDE.
  - Spring Boot Annotations
  - Properties file vs YAML file
  - Spring Boot starters
  - Spring MVC Application



- b) **Spring Data JPA**
  - Introduction
  - Features of spring data JPA
  - Working with H2 database
  - Working with MySQL database
  - Project Lombok
  - CRUD operations
  - Exception Handling in Spring Boot
  - RestTemplate
  - WebClient
  - Flyway Database Migration
  - Spring Boot Caching
  - Swagger
  - Spring Boot Actuators
  - Spring Security
  - Authentication
  - Authorization

### Spring Data JPA MongoDB Expressions



## Java Framework: Spring Micro-services

### a) Introduction

- Monolithic Architecture
- Micro Service Architecture
- Creating micro services using spring boot
- Micro service communication
- Spring Cloud API Gateway
- Service Registry (Eureka Server)
- Hystrix in microservices
- Loading Balancing using Ribbon.
- Zipkin and Slueth
- CloudConfig

### b) IDE's

- Spring Tool Suit (STS)
- IntelliJ

### c) Embedded Servers

- Tomcat, Jetty, Undertow

### d) Embedded Databases

- H2 , HSQL, Derby

### e) Tools

- POST MAN



## HTML-5

### a) Introduction

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>➤ What is HTML5?</li> <li>➤ Types of Browsers?</li> <li>➤ Types of Search Engines?</li> <li>➤ What is Web site?</li> <li>➤ What web page?</li> <li>➤ Simple HTML skeleton program</li> <li>➤ Comments in Java</li> <li>➤ HTML5 Meta Tags</li> <li>➤ HTML Basic Tags</li> <li>➤ Phrase Tags in Html5</li> <li>➤ HTML Colors</li> <li>➤ HTML Images</li> <li>➤ HTML Hyperlinks</li> <li>➤ List in HTML</li> <li>➤ HTML Tables</li> <li>➤ Block Elements vs Inline Elements</li> <li>➤ HTML forms</li> </ul> | <ul style="list-style-type: none"> <li>➤ GET vs POST methodology</li> <li>➤ HTML datalist Tag</li> <li>➤ Frames</li> <li>➤ &lt;iframe&gt; tag</li> <li>➤ HTML Audio</li> <li>➤ HTML Video</li> <li>➤ Graphics in HTML</li> <li>➤ HTML Layouts</li> </ul> |
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### b) Editors

- NotePad
- NotePad++



## CSS-3

### a) Introduction

- What is CSS?
- Types of CSS?
- CSS background property
- CSS borders
- CSS margins
- CSS paddings
- CSS ID selector
- CSS Class selector
- CSS Height and Width
- CSS overflow property
- CSS border-radius property
- CSS box-shadow property
- CSS float property
- CSS List property
- CSS tables
- CSS display property
- CSS transform property
- CSS transition property
- CSS position property

### b) CSS Design Work

- CSS Design 1
- CSS Design 2
- CSS Design 3

### c) Editors

- Sublime



## JavaScript

### a) Introduction

- Java vs JavaScript
- Features of JavaScript
- Types of JavaScript
- Output statements in JavaScript
- JavaScript Engine
- JavaScript Comments
- JavaScript variables
- JavaScript LOOPS
- JavaScript Functions
- BOM (Browser Object Model)
- DOM (Document Object Model)
- JavaScript Date objects
- JavaScript Form Validation
- JavaScript Events
- JavaScript Regular Expression



**b) Editor**

- VSC (Visual Studio Code)

**c) Task**

- Task 1
- Task 2
- Task 3

## bootstrap-4

**a) Introduction**

- What is Bootstrap
- Advantages of Bootstrap
- Bootstrap colors
- Bootstrap borders
- Bootstrap backgrounds
- Bootstrap border-radius
- Bootstrap sizing
- Bootstrap spacing
- Bootstrap Margin
- Bootstrap Containers
- Bootstrap Grid System
- Bootstrap Tables
- Bootstrap Images
- Bootstrap Jumbotron
- Bootstrap Alerts
- Bootstrap Progress Bar
- Bootstrap Pagination
- Bootstrap List Groups
- Bootstrap Collapse plugin
- Bootstrap Glyphicons
- Bootstrap navbar
- Bootstrap Form layouts
- Bootstrap Carousel

**b) Designs**

- Designs 1
- Designs 2
- Designs 3

## Bootstrap 4



# iHub's KEY CLIENTS

## 200 + Clients and Adding More



## STUDENT TRANSFORMATION STAGES



## OUR STUDENTS ARE PLACED IN
