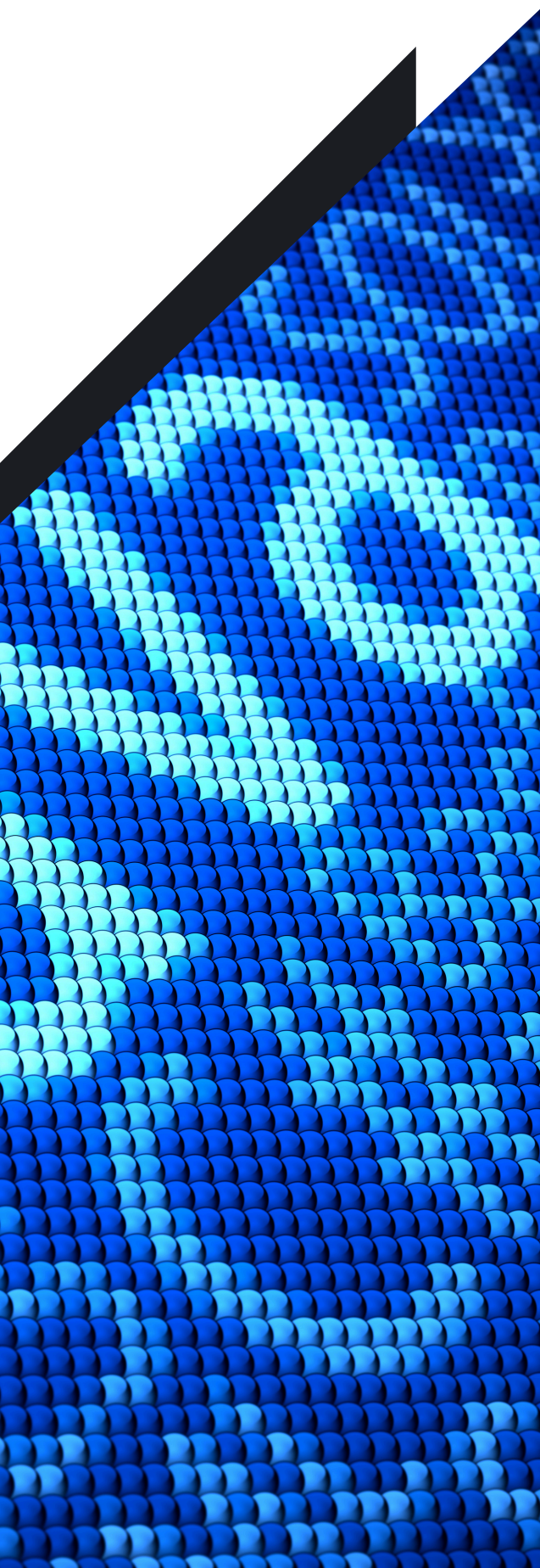
QUANTUM-AI
THE SCHOOL OF DATA AND AI

Java Full Stack

Become a skilled Java Full Stack Developer and build powerful web applications using modern frontend and backend technologies.

java Full Stack Development combines both frontend and backend technologies used to build complete web applications.
This course provides practical training in Java, web technologies, databases, and modern development frameworks.
Students gain hands-on experience with real-world projects and industry tools.



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WHY QUANTUM AI ?

Industry-focused curriculum aligned with current software development trends.
Hands-on training with real-time projects and experienced trainers.
Career guidance, certification support, and placement assistance.

COURSE OVERVIEW

The Java Full Stack course is designed to provide comprehensive knowledge of both frontend and backend development.
Students will learn Core Java, Advanced Java, databases, and modern web technologies such as HTML, CSS, and JavaScript.
The course also covers frameworks like React and Spring Boot for building scalable applications.
Learners will gain hands-on experience through practical coding exercises and real-time projects.
By the end of the course, students will be able to design, develop, and deploy full stack web applications.



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WHAT YOU WILL LEARN !

Java Full Stack Development

- Java Core
- Introduction
- Installation
- Programming Elements
- First Application
- Data Types
- Operators
- Control Statements
- Access Modifiers
- Wrapper Classes
- Packages
- Object Oriented Programming (OOPS)
- Object Casting
- Exception Handling
- Multithreading
- Garbage Collection
- Inner Classes
- Java I/O
- File Handling
- String Handling
- Reflection API
- Arrays
- Collection Framework
- Map Interface
- JDK 8 Features
- JDK 10 & 11 Features

Servlets

- Introduction to Servlets
- Developing and Deploying Servlet Applications
- ServletRequest & ServletResponse
- ServletConfig
- ServletContext
- HttpServlet
- HttpServletRequest & HttpServletResponse
- HTML to Servlet Communication
- Servlet to Database Communication
- Request Dispatching
- Redirecting
- Attributes
- State and Session Management
- URL Rewriting
- Hidden Form Fields
- Cookies
- HttpSession
- Filters
- Listeners
- Annotations in Servlet Programming
- Authentication & Authorization
- Error Handling and Welcome File Configuration

Advanced Java

JDBC (Java Database Connectivity)

- Introduction to JDBC
- Establishing Connection to Database
- Statement
- PreparedStatement
- CallableStatement
- ResultSet Interface & Metadata
- Batch Updates
- Transaction Management

JSP (Java Server Pages)

- Introduction to JSP & JSP Tags
- Scripting Elements & JSP Implicit Objects
- Directives
- Standard Actions
- Using Java Beans in JSP
- Expression Language with JSTL
- Working with JSTL
- Custom Tags
- MVC Architecture
- Deploying Projects using MVC

Database (Oracle)

- Database Fundamentals
- RDBMS Concepts
- Oracle Introduction
- DDL (Data Definition Language)
- DML (Data Manipulation Language)
- DRL
- Functions
- Integrity Constraints
- Joins
- Subqueries
- Transactions
- Views
- Indexes
- PL/SQL
- Error Handling
- Procedures
- Functions
- Triggers

Frontend Technologies

- HTML
- Introduction to Web & Internet Based Services
- Introduction to HTML
- Formatting Tags
- Images
- Anchor Tags
- Tables
- Lists
- Frames & Div Tags
- HTML Forms
- Form Controls
- HTML5
- Canvas & Graphics
- SVG & Canvas
- Multimedia
- Geolocation Integration

CSS

- Introduction to CSS
- CSS Selectors
- CSS Attributes
- CSS Lists & Tables
- Advanced CSS
- Borders, Text Properties & Backgrounds
- CSS3 2D & 3D Transforms
- CSS3 Transitions & Animations
- CSS3 Multiple Columns
- CSS3 User Interface Features

JavaScript

- Introduction to Scripting Language
- History of JavaScript
- JavaScript Operators
- Conditional Statements
- Looping Statements
- Arrays
- Functions
- JavaScript Object Basics
- Date, Time & Math Objects
- Error & Exception Handling
- JavaScript OOP Concepts
- HTML DOM
- Events in JavaScript
- Regular Expressions
- Window Object
- History Object & Cookies
- Web Hosting (Live Website)

Frontend Frameworks

- Bootstrap
- ReactJS
- React Introduction
- React Features & Syntax
- Components, Props & State
- Styling Components
- Debugging React Applications
- Component Lifecycle
- React Hooks
- HTTP Requests / AJAX Calls
- React Routing (v5 & v6)
- React Forms & Validation
- Deploying React Applications
- Redux
- React Material UI
- Error Handling
- New Features of React 18
- Unit Testing
- Webpack
- Server Side Rendering
- Cloud Deployment
- JAVA FULLSTACK (1)

Backend Framework

- Spring Boot & Microservices
- Introduction to Spring Boot
- Building Spring Boot Applications
- REST APIs with In-Memory Database
- REST APIs with Relational Database
- JPA Repository Concepts
- Spring Boot Actuator
- Custom Logging
- Profile Components
- Auto Configuration
- Thymeleaf
- Spring Web Integration
- Spring Security
- Microservices Concepts
- Microservices Design
- Spring Cloud
- Spring Cloud Config
- Netflix Tools
- Fault Tolerance
- API Gateway
- Messaging Queue (CloudBus)
- OAuth2
- Swagger API
- Cloud Hosting

Tools & Technologies

- Git
- GitHub
- Jenkins
- Docker
- Datadog
- JUnit
- Mockito
- JMeter
- Maven
- Jira
- SonarQube
- SLF4J
- ELK Stack
- Heroku
- Chef

Start your journey to becoming a skilled Java Full Stack Developer with industry-relevant training and real-world project experience.
Join us today and build a successful career in modern web and enterprise application development.

Get in Touch

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