IntelliQ IT



Full Stack Java Development

- **♣** Full Stack Introduction
- **Lesson** Environment Setup
- Core Java
- **Advanced Java Topics**
- Databases(PL/SQL & SQL)
- **Web Development**
- Angular / React JS
- **JAVA Frameworks Introduction**
- Spring Core Module
- Spring boot
- **Rest APIs Development**
- **♣** Spring Data JPA ▲
- **♣** Microservices Architecture
- **4** Spring Security
- **Mini Projects Development**
- **Major Project Development**
- **Interview Guidance**
- **Resume Preparation**
- **Mock Interviews**
- **Mock Tests**
- **Placement Assistance**

INTRODUCTION

- WHAT IS FRONT END DEVELOPMENT
- FRONT END TECHNOLOGIES

- WHAT IS BACK END DEVELOPMENT
- BACKEND DEVELOPMENT TECHNOLOGIES
- WHAT IS FULL STACK DEVELOPMENT
- ROLES OF FULL STACK DEVELOPER

CORE JAVA

- WHAT IS PROGRAMMING LANGUAGE?
- TYPES OF PROGRAMMING LANGUAGES
- JAVA Intro, History & Principles of JAVA?
- JAVA INSTALLATION
- JAVA PROGRAM EXECUTION FLOW
- JVM ARCHITECTURE
- IDENTIFIERS & KEYWORDS
- VARIABLES & DATA TYPES
- JDK VS JRE VS JVM
- METHODS
- OBJECT ORIENTED PRINCIPLES
- ARRAYS & STRINGS HANDLING
- EXCEPTION HANDLING
- MULTI-THREADING
- FILE IO OPERATIONS
- WRAPPER CLASSES
- AUTO BOXING, UN-BOXING
- COLLECTIONS FRAMEWORK
- LAMBDA EXPRESSIONS
- FUNCTIONAL INTERFACES
- DEFAULT & STATIC METHODS
- STREAM API
- METHOD REFERENCES
- DATE AND TIME API CHANGES
- JAVA 9 MODULE SYSTEM
- JAVA 11 FEATURES
- JAVA 17 FEATURES
- JAVA 21 FEATURES
- WORKING WITH IDE
- LOGICAL PROGRAMMING

ADVANCED JAVA

SERVLETS

- JSP
- JDBC
- MVC ARCHITECTURE
- PROJECT DEVELOPMENT
- DEBUGGING

SPRING BOOT & MICROSERVICES

SPRING FRAMEWORK

- WHAT IS FRAMEWORK
- TYPES OF JAVA FRAMEWORKS
- SPRING FRAMEWORK INTRODUCTION
- SPRING MODULES OVERVIEW
- SPRING CORE MODULE
- IOC CONTAINER
- SPRING ARCHITECTURE
- DEPENDENCY INJECTION
- CONSTRUCTOR INJECTION
- FIELD INJECTION
- SETTER INJECTION
- SPRING BEANS
- COMPONENT SCANNING
- BEAN LIFECYCLE
- AUTOWIRING
- BEAN SCOPES

SPRING BOOT

- SPRING VS SPRINGBOOT
- SPRINGBOOT INTRODUCTION
- STARTER POMS
- SPRINGBOOT ADVANTAGES
- SPRINGBOOT APP CREATION
- SPRINGBOOT INTERNALS
- SPRINGBOOTAPPLICATION
- AUTO CONFIGURATION
- RUN () METHOD INTERNALS
- ACTUATORS
- RUNNERS
- EMBEDDED CONTAINERS

PROPERTIES VS YML

SPRING DATA JPA

- DATA JPA INTRODUCTION
- ORM PRINCIPLES
- ENTITIES
- REPOSITORIES
- CRUDREPO
- JPAREPO
- FINDBY
- METHODS
- CUSTOM QUERIES
- GENERATORS
- QBE
- PAGINATION
- SORTING
- SPRING PROFILES
- ASSOCIATION MAPPING
- TRANSACTIONS

SPRING WEB MVC

- INTRODUCTION
- HANDLER MAPPER
- MODEL AND VIEW
- VIEW
- VIEWRESOLVER
- DISPATCHER SERVLET
- CONTROLELR
- FORMS
- EMAIL SENDING
- LOGGING
- VALIDATIONS
- THYMELEAF

SPRING REST

- DISTRIBUTED APPLICATION
- REST ARCHITECTURE
- REST PRINCIPLES
- SOAP VS REST

- HTTP METHODS, PROTOCOL, REQUEST, RESPONSE
- JACKSON API
- JSON DATA
- STATUS CODES
- REST CONTROLLER
- REST API DEVELOPMENT
- PATH VARIABLES
- RESPONSE BODY
- REQUEST BODY
- POSTMAN
- EXCEPTION HANDLING
- RESTTEMPLATE
- REST REPOSITORIES
- WEBCLIENT
- SWAGGER
- MEDIA TYPES

SPRING SECURITY

- AUTHENTICATION
- IN MEMORY AUTHENTICATION
- AUTHORIZATION
- AUTH PROVIDER
- USER DETAILS SERVICE
- OAUTH 2.0
- JWT
- AUTH PROVIDER

MICROSERVICES

- MICROSERVICES ARCHITECTURE
- SERVICE REGISTRY
- MONOLITH VS MICROSERVICES
- MICROSERVICES ARCHITECTURE
- SPRING CLOUD LIBRARIES
- ADMIN SERVER
- ZIPKIN SERVER
- CONFIG SERVER
- FEIGNCLIENT
- LOAD BALANCING
- APIGATEWAY
- FILTERS

- ROUTINGS
- KAFKA INTEGRATION
- REDIS INTEGRATION
- SPRING BATCH
- SPRING SCHEDULAR

DATABASE

- INTRODUCTION TO DBMS
- ENVIRONMENTAL SETUP
- DATABASE COMMANDS
- DML OPERATIONS
- DDL Commands
- DQL OPERATIONS
- SQL CLAUSES
- SQL OPERATORS
- SQL FUNCTIONS
- SUB QUERIES
- INTEGRITY CONSTRAINTS
- SQL JOINS
- FUNCTIONS
- PROCEDURES

HTML

- WEB DEVELOPMENT OVERVIEW
- HTML INTRODUCTION
- HTML DOCUMENT STRUCTURE
- HEADINGS & PARAGRAPHS
- TYPOGRAPHY
- HTML LINKS
- IMAGES IN HTML
- ATTRIBUTES
- LISTS
- HTML TABLES
- FORMS & INPUTS
- BLOCK & INLINE ELEMENTS
- DIVS & SPANS
- CLASSES & IDS
- IFRAMES
- HTML 5 SEMANTICS

CSS

- CSS INTRODUCTION
- BASIC CSS SELECTORS
- DEV TOOLS INTRODUCTION
- FONTS & COLORS
- BACKGROUNDS
- BORDERS
- BOX MODEL
- MARGIN & PADDING
- DISPLAY, ALIGNMENT & POSITIONING
- PSEUDO SELECTORS
- RESPONSIVE LAYOUTS
- INTRODUCTION TO FLEXBOX
- BUILDING RESPONSIVE WEBSITE

BOOTSTRAP

- BOOTSTRAP INTRODUCTION
- TYPOGRAPHY & UTILITY CLASSES
- NAVBARS & NAVS
- FORMS & INPUTS
- TABLES & PAGINATION
- CARDS
- COLLAPSE
- TOOLTIPS
- MODELS
- INPUT GROUPS
- ALERTS & SPINNERS
- CAROUSEL SLIDER
- ACCORDION
- POPOVERS

JAVA SCRIPT

- INTRODUCTION TO JAVA SCRIPT
- SCRIPT TAGS
- CONSOLE OUTPUT
- DATA TYPES
- VARIABLES
- ARRAYS
- STRINGS MANIPULATION

- JAVA SCRIPT OBJECTS
- JSON
- LOOPS
- CONDITIONALS
- FUNCTIONS
- CONSTRUCTOR FUNCTIONS
- WINDOW OBJECT & DOM
- DOM SELECTION
- DOM MANIPULATION
- EVENTS HANDLING FORMS
- ES6 CLASSES

REACT JS

- INTRODUCTION TO REACT JS
- SPA VS MPA
- REACT VS ANGULAR VS VUE
- SETTING UP THE ENVIRONMENT (NODE.JS, NPM)
- CREATE REACT APP (CRA)
- FOLDER STRUCTURE OVERVIEW
- REACT ELEMENTS
- REACT DOM
- JSX
- REACT COMPONENTS
- PROPS
- VITE TOOL
- FUNCTIONAL COMPONENTS
- INTRODUCTION TO HOOKS
- STATE MANAGEMENT
- INTERACTION BETWEEN COMPONENTS
- CONTEXT API
- AXIOS
- FORMS IN REACT
- REACT ROUTING
- REACT HOOKS
- REDUX WITH FUNCTIONAL COMPONENT
- TESTING IN REACT & DEPLOYMENT