



# FULL STACK JAVA DEVELOPER - JAVA + JSP + RESTFUL WS + SPRING

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## ● GETTING STARTED

- INTRODUCTION
- COURSE OVERVIEW
- SETUP
- OUR FIRST JAVA PROGRAM
- VARIABLE AND DATATYPES
- PRIMITIVE DATA TYPES
- BIGDECIMAL CLASS
- STRING BASICS
- TYPE CASTING
- EXERCISE - SOLVE AN EQUATION

## ● DECISION MAKING UNDER JAVA

- OPERATORS
- ARITHMETIC OPERATORS
- MAKING DECISION WITH OPERATORS
- TERNARY OPEARTOR
- ASSIGNMENT OPERATORS
- MAKING DECISION WITH IF ELSE
- EXERCISE

## ● FLOW CONTROL

- SWITCH CASE
- FOR LOOP
- WHILE LOOP
- DO-WHILE LOOP
- LOOPS REVISITED

- BREAK AND CONTINUE
- NESTED LOOPS
- EXERCISE

## • METHODS

- METHODS
- METHODS PARAMETERS AND RETURN TYPE
- METHOD OVERLOADING
- EXERCISE

## • OOPS CONCEPTS

- CLASSES-INTRODUCTION
- CLASSES - GETTERS AND SETTERS
- CLASSES - ADDING FUNCTIONALITY INTO CLASS
- CONSTRUCTORS
- DEFAULT CONSTRUCTORS
- INHERITANCE
- TYPES OF INHERITANCE
- COMPOSITION
- ADDING FUNCTIONALITY
- ENCAPSULATION
- POLYMORPHISM
- EXERCISE

## • MORE CORE CONCEPTS

- INTERFACES
- ABSTRACT CLASS
- INNER CLASSES
- TYPES OF NESTED CLASS
- LOCAL INNER CLASS
- ANONYMOUS OBJECT
- ANONYMOUS INNER CLASS
- STATIC ELEMENTS
- STATIC INNER CLASS
- FINAL KEYWORD

- PACKAGES
- SCOPE
- ACCESS MODIFIER
- EXCEPTION HANDLING
- EXCEPTION HANDLING, MULTIPLE CATCH BLOCKS
- FINALLY BLOCK
- USER DEFINED EXCEPTION
- CHECKED AND UNCHECKED EXCEPTIONS
- ENUM
- STRINGS
- STRING FORMATING
- EXERCISE

## • **ARRAY**

- ARRAY OVERVIEW
- FOREACH LOOP
- METHODS - CALL BY VALUE AND REFERENCE
- ISSUES WITH ARRAY
- EXERCISE

## • **ADVANCE CONCEPTS**

- COLLECTIONS FRAMEWORK
- ARRAY LIST
- AUTOBOXING AND UNBOXING
- GENERICS
- TYPE PARAMETERS
- SETS
- MAPS
- TREEMAPS
- LAMBDA EXPRESSION
- PREDICATES

- **FILE HANDLING UNDER JAVA**

- DATA STREAMS
- WRITING ONTO FILES
- READING FILES WITH BUFFEREDREADER
- FILE DELETION
- SERIALIZATION OF OBJECTS

- **GIT : GIT BASICS**

- GIT OVERVIEW
- SETTING UP GIT
- CLONE AND IMPORT GIT PROJECT INTO ECLIPSE
- CLONE GIT PROJECT DIRECTLY FROM ECLIPSE

- **JSP AND SERVLETS**

- INTRODUCTION
- JSP ELEMENTS
- INCLUDE FILE(S) IN JSP PAGE
- IMPORT CLASS INTO JSP PAGE
- FORWARD AND REDIRECT UNDER JSP
- MVC OVERVIEW
- FORMS
- BEANS AND ITS SCOPES
- SESSION MANAGEMENT
- JSTL CORE TAGS
- JSTL FUNCTIONS
- BUILDING CUSTOM TAGS
- INTEGRATE WEB TEMPLATE
- SERVLETS INITIALIZATION
- INTERACTING WITH DATABASE
- LISTING DATA ON WEBPAGE
- ADD RECORD(S) INTO DATABASE
- UPDATE RECORD(S) INTO DATABASE
- DELETE RECORD(S) INTO DATABASE
- ADDING JSTL SUPPORT
- IMAGE/FILE UPLOAD

- **HIBERNATE**

- HIBERNATE INTRODUCTION
- HIBERNATE FRAMEWORK
- HIBERNATE QUERY LANGUAGE BASICS
- JSP AND SERVLETS: INTEGRATION OF HIBERNATE
- JSP AND SERVLETS : BUILDING THE APPLICATION
- CAPSTONE PROJECT -2

- **SPRING MVC INTRODUCTION**

