Welcome to ineuron.ai

Enterprise Java with Spring Boot Tech Neuron

Description:

Java is one of the most widely used programming languages, owing to its versatility and compatibility. Java can be used for a variety of purposes, including software development, mobile application development, and large-scale system development. This Java course will teach you all you need to know to get started with Java.

Start Date:

Doubt Clear Time: Wednesday: 2:00 pm to 4:00 pm (IST) Saturday :

Course Time:

Features:

Course material

Course resources

On demand recorded videos

Practical exercises

Quizzes

Assignments

Course completion certificate

What we learn:

Java Basics

Loops

OOP

Java Projects

Exception Handling

Blockchain Project

MultiThreading

Collection Framework

Junit

MySQL

NoSQL

JDBC

Hibernate

Requirements:

System with Internet Connection

Interest to learn

Dedication

Instructor:

>Welcome to the Course:

>>Course Introduction

>Java Basics:

>>Introduction to Java

>>Setup

>>Getting Started

>>How Java Works

>>Variables

>>Data Types

>>Naming Conventions

>>Operators

>>Conditional Statements

>>If Else

>>Ternary

>>Switch

>Loops:

>>While

>>For

>>Nested Loops

>>Break and Continue

>OOP:

>>Introduction to Object Oriented Programming

>>Class and Object

>>Constructor

>>This Keyword

>>Method and Constructor Overloading

>>Static Keyword

>>Inner Class

>>Arrays

>>Enhanced for loop

>>Varargs

>>Inheritance

>>Super Method

>>Multiple Inheritance

>>Method Overriding

>>Super Keyword

>>Multiple Inheritance

>>Encapsulation

>>Wrapper class | Autoboxing

>>Abstract Keyword

>>Final Keyword

>>Interface

>>Anonymous Inner class

>>Functional Interface

>>Lambda Expression

>>Package

>>Access Modifier

>Java Projects:

>>Number Guessing Game

>>Java Object to JSON Convertor

>Exception Handling:

>>Exceptions

>>Try Catch

>>Finally

>>Multiple Catch Blocks

>>Checked Exceptions

>>User Defined Exception

>Blockchain Project:

>>Building Blockchain using Java

>MultiThreading:

>>Introduction

>>Thread Class

>>Runnable

>>Lambda Expression

>>Thread Priority

>>Synchronized

>Project:

>>Chatting Application

>Collection Framework:

>>Introduction

>>Iterator and List Interface

>>Set

>>Map

>>Comparator, Comparable

>>Generics

>Projects:

>>Online Voting System

>>Work Scheduler

>Junit:

>>Introduction

>>Unit Testing

>>Test Exceptions

>>Multiple Assertions

>>Annotations

>Junit Project:

>>Test Cases for Online Voting System

>MySQL:

>>Introduction to SQL

>>Setup

>>What is Database

>>Creating, Dropping Databases

>>Introduction to Tables

>>Creating, Dropping, Altering the Tables

>>CRUD

>>Select, Insert, Update, delete Queries

>>Where, groupby, having

>>Aggregate Functions

>>One to many, many to one, many to many relationship

>Sql with Java Projects:

>>Indexing for Blockchain Project

>>Online Course Management

>NoSQL:

>>Introduction to NoSQL

>>Categories

>>NoSQL vs RDBMS

>>Couch DB

>>Mongo DB

>>Cassandra

>>Redis

>NoSql with Java Projects:

>>IPL Stats

>JDBC:

>>Introduction

>>CRUD Operations

>>ResultSet

>>Connection Pooling

>JDBC Project:

>>Book My Calendar

>Hibernate:

>>Introduction to Hibernate

>>Setup

>>Configuration File

>>SQL Property

>>Annotation

>>CRUD

>>Embeddable Object

>>Mapping Relations

>>EAGER LAZY

>>Caching

>>HQL

>>Object States Persistence Life Cycle

>>Get vs Load

>>JPA

>Hibernate Project:

>>Hall of Fame

>Servlets and JSP:

>>Introduction

>>Setup

>>Creating First project

>>Creating Servlet and XML

>>Get vs Post

>>RequestDispatcher

>>HttpServletRequest and HttpServletResponse

>>RequestDispatcher and sendRedirect

>>HttpSession and Cookie

>>ServletConfig and ServletContext

>>Servlet Annotation Configuration

>>JSP

>>JSP to Servlet

>>Tags, Scriptlet, Declaration, Directive, Expression

>>Implicit Objects

>>Exception handling in JSP

>>JDBC in JSP

>>Servlet Filters

>JSP Project:

>>Stock Broker

>Spring:

>>Introduction

>>Dependency Injection

>>BeanFactory

>>ApplicationContext

>>Spring Container

>>Singleton vs Prototype

>>Setter Injection

>>Ref Attribute

>>Constructor Injection

>>Autowire

>>Primary Bean

>Spring Boot:

>>Introduction

>Spring MVC:

>>Introduction

>>Creating Controller

>>Accepting User Input

>>@RequestParam

>>@ModelAndView

>>Prefix and Suffix

>>Model and ModelMap

>>ModelAttribute

>>GetMapping and PostMapping

>Spring Project:

>>Quiz Application

>Spring ORM:

>>Introduction

>>Spring Hibernate Config

>>MySQL and DAO

>>DAO Creation

>>Add and Fetch

>Spring Data JPA:

>>Spring Data JPA Configuration

>>JPARepository

>>JPARepository Add and Fetch

>>Query DSL

>>Query Annotation

>Spring REST:

>>Introduction

>>REST GetMapping

>>Jackson

>>PathVariable

>>RestController

>>PostMapping

>>Jackson XML

>>Produces Attirbute

>>RequestBody and Consumes Attribute

>Spring AOP:

>>Why AOP

>>AOP Terms

>>Aspect and Before Annotation

>>Logger

>>After Finally

>>AfterReturning and Throwing

>Spring Security:

>>Introduction

>>Implementation

>>Managing Users

>>Passwords

>>Authentication

>>Authorization

>>CSRF and CORS

>>OAuth2

>>JWT

>Spring Mega Project:

>>Secure Stock Broker App

>Agile and Scrum (Optional):

>>Agile Values

>>12 Agile Principles

>>Scrum Overview

>>Scrum Values

>>Concept of Sprints

>>Scrum Roles

>>Role of Scrum Master

>>Role of Product Owner

>>Role of Development Team

>>Daily Stand-up

>>Sprint Planning

>>Sprint Review

>>Sprint Retrospective

>>Backlog Refinement

>>User Stories

>>Product Backlog and Sprint Backlog

>>Working Agreements

>>Definition of Ready, Done

>>Team Velocity

>>Burndown Chart

>Docker Installation Basics:

>>What is Docker?

>>How to install Docker and Hello World

>>What is container in Docker

>>Docker vs Virtual Machine

>>First interaction with busy box image

>Fundamentals of docker:

>>Docker lifecycle and PS

>>Start and delete a container

>>Getting a mongodb container for fun

>>Exploring exec command

>>Multiple ways to get inside a container

>Custom Docker images:

>>Analogy for custom docker image

>>Our first base image and custom image

>>Behind the scene for custom image

>>Creating a custom mongodb image

>>Concept of caching in docker

>>Provide a custom name for your image

>Project and Docker:

>>Introduction to node project for docker

>>Introduction to node project for docker part 2

>>Containarize a node application

>>Performance upgrade in node project container

>Multi container setup:

>>Introduction to multi docker container

>>A mini mongo connector project

>>Put your node code in a container

>>Introduction to docker compose

>>Connect 2 compose images in docker

>>Access the compose container app with browser

>Ngnix - production grade deployment:

>>Ngnix A production grade docker

>>Attaching volumes in Docker

>>Types of docker files

>>Dev test and production stages

>>Understand react project for docker deployment

>>Docker for development

>>Docker for testing

>>Docker for production

>Docker AWS and Travis CI:

>>Docker CI and AWS

>>What is CI CD Jenkins vs Travis CI

>>Moving to AWS Elastic Beanstalk

>>Moving project to github repo

>>Reading Travis CI documentation

>>Writing our 1st travis CI config file

>>AWS IAM user generation

>>Elastic Beanstalk and S3 bucket

>>Finally hosting app on AWS with CI integrated with docker

>>TURN OFF those AWS apps