Shiva Concept solution

START coding TODAY

A PROVEN PATH TO GET A JOB IN 6 TO 8 MONTHS OR LESS

course designer

I am a teacher and entrepreneur for the past 12 years, I am managing the Software development company Kangaroo Software PVT LTD and the best Software Education Institute SHIVA CONCEPT SOLUTION.I am very much passionate about teaching and helping students.

shiva gautam

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PART 1: INTRODUCTION TO JAVA

1.Getting Started with Java

- Overview of Java's history and significance.
- Setting up the Java Development Kit (JDK) and (IDE).

2.Basic Concepts and Syntax

- Variables, data types, and operators.
- Control flow (if-else, loops).
- Input/output operations.

PART 2: OBJECT-ORIENTED PROGRAMMING (OOP) IN JAVA

1.Classes and Objects

- Creating classes and objects.
- Constructors and instance variables.
- Access modifiers (public, private, protected)..

2.Inheritance and Polymorphism

- Extending classes (inheritance).
- Method overriding.
- Abstract classes and interfaces.

3.Advanced OOP Concepts

- Enumerations.
- Nested classes (static and inner classes).
- Object cloning.

PART 3: EXCEPTION HANDLING AND FILE I/O

1.Exception Handling

- Try-catch blocks.
- Custom exceptions.
- Finally and resource management.

2.File I/O and Serialization

- Reading and writing files.
- Serialization and deserialization.

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PART 4: COLLECTIONS AND GENERICS

1.Collections Framework

- Lists, sets, and maps.
- Iterators and enhanced for loops.
- Sorting and searching.

2.Generics

- Type safety using generics.
- Generic classes and methods.

PART 5: MULTITHREADING AND CONCURRENCY

1.Multithreading

- Creating threads.
- Synchronization and thread safety.
- Thread pools.

2.Concurrency Utilities

- Extending classes (inheritance).
- Method overriding.
- Abstract classes and interfaces.

PART 6: ADVANCED TOPICS

1.Reflection and Annotations

- Inspecting classes at runtime.
- Custom annotations.

- **AJAX, Session, Cookie, File Uploading**

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PART 7: WEB DEVELOPMENT WITH JAVA

1.Servlets and JSP

- Building dynamic web applications.
- Handling HTTP requests and responses.

2.Database Connectivity with JDBC

- Connecting to databases.
- Executing SQL queries.

1. HTML and CSS

- HTML5 tags and attributes.
- CSS styling (selectors, properties, responsive design)..

2. JavaScript:

- Variables, data types, and operators.
- DOM manipulation (selecting elements, event handling).

3. Bootstrap:

- Responsive design using Bootstrap.
- Bootstrap components (navbar, cards, modals)..

PART 8: ADDITIONAL TECH SKILLS

1.Artificial Intelligence (AI)

- Basics of AI and machine learning.
- chat gpt, prompt engineering

2.Cloud Computing (AWS)

- Setting up an AWS account.
- Deploying applications on AWS (EC2, S3, Lambda).

3. Git and GitHub:

- Version control using Git.
- Collaborating on GitHub repositories.

4.Deployment:

- Deploying web applications to production servers.
- Continuous integration and continuous deployment (CI/CD) pipelines.

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PART 9: REACT JS

1: Getting Started
- Introduction to React.js
- Setting up the development environment
- JSX syntax and creating components

2: Components and Props
- Understanding components
- Creating and using props
- PropTypes and defaultProps

3: State and Lifecycle
- Working with component state
- Lifecycle methods
- Handling events

4: Forms and Events
- IControlled vs. Uncontrolled components
- Form submission and validation
- Event handling in React

5: React Router
- Setting up routing
- Creating nested routes
- Navigation with Link and NavLink

6: Styling
- CSS Modules
- Styled-components
- Using third-party UI libraries

7: State Management with Redux
- Introduction to Redux
- Setting up Redux in React
- Actions, reducers, and the Redux store

8: Asynchronous Data Fetching
- Fetching data from APIs
- Using async/await
- Handling loading states and errors

9: React Hooks
- Introduction to Hooks
- useState, useEffect
- Custom hooks

10: Testing
- Introduction to testing libraries
- Writing unit tests
- Snapshot testing

11: Advanced Topics
- Context API
- Performance optimization
- Error boundaries

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PART 10: SPRING CORE

1.Introduction to Spring Framework

- Overview of Spring Framework and its features
- Dependency Injection (DI) and Inversion of Control (IoC) principles
- Spring Bean lifecycle and configuration.

2.Spring Configuration

- XML-based and Annotation-based configuration
- Configuration using @Configuration classes and @ComponentScan

3.Spring Bean Scopes and Profiles

- Understanding different bean scopes (singleton, prototype, request, session, etc.)
- Using Spring profiles for environment-specific configurations..

4.Spring AOP (Aspect-Oriented Programming)

- Understanding AOP concepts (aspects, join points, advice, pointcuts)
- AOP implementation using Spring AOP

PART 11: SPRING MVC (MODEL-VIEW-CONTROLLER)

1.Introduction to Spring MVC

- MVC architecture and its components (Model, View, Controller)
- Request flow in Spring MVC.

2.Spring MVC Configuration

- Configuring DispatcherServlet
- Handler mapping and handler adapter configuration.

3.Controllers and Request Handling

- Creating controllers using @Controller annotation
- Handling different types of requests (GET, POST, PUT, DELETE)
- Request parameters and path variables

4.Views and ViewResolver

- Configuring view resolver for resolving views
- Working with different view technologies (JSP, Thymeleaf, etc.).

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PART 12: SPRING BOOT

1.Introduction to Spring Boot

- Overview of Spring Boot features and advantages
- Auto-configuration and convention over configuration

2.Spring Boot Starter Projects

- Creating a Spring Boot project using Spring Initializr
- Understanding starter dependencies

3.Spring Boot Configuration

- Externalizing configuration using properties and YAML files
- Customizing application properties

4.Spring Boot Web Development

- Building RESTful APIs with Spring Boot
- Integrating Spring Boot with Spring Data JPA for database operations

PART 13: MYSQL DATABASE INTEGRATION

1.Introduction to MySQL

- Overview of MySQL database management system
- Installing MySQL server and client

2.SQL Basics

- Understanding SQL syntax
- CRUD operations (Create, Read, Update, Delete)
- Data definition language (DDL) and data manipulation language (DML) commands.

3.Database Design and Modeling

- Entity-relationship modeling
- Normalization and denormalization

4.Java Database Connectivity (JDBC)

- Connecting Java applications to MySQL database using JDBC
- Executing SQL queries and handling results

5.Spring Data JPA

- Introduction to Spring Data JPA
- Creating repositories and defining query methods
- Performing CRUD operations using Spring Data JPA

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PART 14: SPRING CLOUD

1: Introduction and Setup

- Overview of microservices architecture
- Introduction to Spring Cloud
- Setting up a Spring Boot project
- Service registration and discovery with Eureka

2: Configuration and Fault Tolerance

- Externalized configuration with Spring Cloud Config
- Fault tolerance with Hystrix
- Circuit breaking and fallback mechanisms

3: API Gateway and Tracing

- API Gateway with Spring Cloud Gateway
- Distributed tracing with Spring Cloud Sleuth and Zipkin

4: Communication and Resilience

- Service-to-service communication with Feign and RestTemplate
- Retry patterns with Spring Retry

5: Messaging and Security

- Event-driven architecture with Spring Cloud Stream and Kafka
- Security with Spring Security and OAuth2

6: Monitoring and Advanced Topics

- Logging and monitoring with ELK stack and Prometheus
- Advanced topics: distributed transactions, service mesh

CORE VALUES

They're the heart of our institute, These values are the foundation of our daily operations, shaping our actions to provide an exceptional learning experience and empower students in programming.

Innovation

We encourage creative thinking and new ideas in our teaching methods and curriculum to keep learning dynamic and engaging.

Goals

We help you set clear objectives and work with you to achieve them, ensuring your progress and success.

Transparency

We believe in open communication and clarity in all our processes, keeping you informed every step of the way.

faculties

Our instructors are experienced professionals dedicated to providing quality education and guidance.

Responsibility

We take our role seriously in nurturing your skills and ensuring a supportive learning environment.

Trust

You can rely on us for honest guidance, fair practices, and a commitment to your educational journey.

placement

We assist you in securing rewarding opportunities after completing your program, bridging the gap between education and employment.

about Shiva concept solution

Shiva Concept Solution is the top software training center in Indore, India. Since 2013, we have taught more than 50,000 students with high-quality instruction.

ISO-certified and MSME-approved

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shivaconceptsolution.com

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Email

shivaconceptsolution@gmail.com

Social Media

@shivaconceptsolution

Call us

7805063968