Java Full Stack Developer

SYLLABUS

1. WEB DESIGN

1.1. HTML 5
1.2. CSS 3
1.3. JavaScript
1.4. Bootstrap
1.5. Website Go Live
1.6. Front-end FrameWork

2. React-Js

2.1. jsx Function Components
2.2. import/export components
2.3. React Fragment
2.4. Styling Components
2.5. Props
2.6. States & useState Hook
2.7. Conditional Rendering
2.8. List and Keys
2.9. Event Handling
2.10. From Handling
2.11. React Hooks
2.12. React Redux
2.13. Bootstrap
2.14. Tailwind CSS

3. CORE JAVA

3.1. Introduction To Java
3.2. Why Java
3.3. JVM
3.4. Object Oriented Programming Concepts
    1. Abstraction
    2. Encapsulation
    3. Polymorphism
    4. Inheritance
3.5. Class, Objects, Data Types
3.6. Java Coding Standards
3.7. Package – Creating package, naming package
3.8. Java Keywords
3.9. Access Specifiers – Public, Private, Protected, Default
3.10. Static Concept – Block, Variable, Method, Class
3.11. Control Statement – If, If…else, Nested if…else and Switch

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3.12. Flow Statement- for, while, do..while
3.13. Constructor- Default, Parameterized
3.14. Inheritance
3.15. Extends, super and this keyword
3.16. Method Overloading, Method Overriding
3.17. Interface
3.18. Abstract Class
3.19. Garbage Collection
3.20. Serialization
3.21. Exception Handling
3.22. Exception Handling- try, catch, throw, throws, finally
3.23. String
3.24. String Buffer
3.25. Collection
3.26. List
    1. Array List

2. Linked List

2.29. Set
   1. Hash Set
   2. Tree Set

2.30. Map
   1. Hash Map
   2. Tree Map

2.31. Enums

2.32. Date Concept

2.33. Thread
   1. Concept, Lifecycle
   2. Extends Thread
   3. Implement Runnable Interface
   4. Thread Priorities

   1. Synchronization
   2. Object Locking

2.35. JDK 1.8.0 New Features with Hands-on

2.36. Programming practices, Concepts & Interview Preparation

4. J2EE

4.1. JDBC

1. JDBC Introduction
2. JDBC Architecture
3. Database Overview
4. JDBC Basics
5. My SQL
6. Create Database
7. Create Table
8. Insert, Update, Delete
9. Truncate
10. SQL Join

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11. Aggregate Function
    1. MIN
    2. MAX
    3. AVG
    4. SUM
    5. COUNT
12. Java Application Using JDBC Connectivity
13. Handling SQL Exceptions
14. ResultSet
15. Connection

16. Statement
17. Prepared Statement
18. Collable Statement
19. CRUD Application

4.2. Servlet

1. Servlet Basics
2. Need of Server Side Programming
3. Servlet Life Cycle
   1 Init()
   2 Service()
     2.1 doGet()
     2.2 doPost()
   3 Destroy()
4. Servlet Hello World Application
5. Web.xml Structure
6. Servlet Directives- include(), forword(), sendRedirictive()
7. HttpServletRequest, HttpServletResponse
8. Servlet, HTML 5, MySQL, Tomcat using Real Time Login Application

4.3. JSP

1. JSP Basics
2. Creating dynamic Web content with JSP
3. Scriplet
4. Declaration
5. Servlet, JSP, MySQL, Tomcat Login Application
6. Servlet, JSP, MySQL, Tomcat CRUD Application

4.4. Programming practices, Concept & Interview Preparation.

5. FRAMEWORK

5.1. Hibernate

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1. Hibernate Introduction
2. Hibernate Basics
3. Hibernate with HBM
4. Hibernate with Annotation
5. Hibernate CRUD
6. Hibernate Association Mapping
   1. One to One Mapping
   2. One to Many Mapping
   3. Many to One Mapping
   4. Many to Many Mapping
7. Hibernate Aggregation Projection
8. Hibernate Projection
9. Hibernate Application with Mysql DB- CRUD

10. Hibernate Application with Mysql DB, JSP-User Interface- CRUD
11. Programming practices, Concept & Interview Preparation.

5.2. Spring

1. Spring Introduction
2. Spring Basics
3. Inversion of Control
4. Dependency Injection
5. Beans Scope
   5.1 Singleton
   5.2 Prototype
   5.3 Request
   5.4 Session
   5.5 Global-Session
6. Auto wiring
7. Spring Annotations
8. AOP
9. Spring MVC
10. Spring Security Implementation
11. Spring, Hibernate, Mysql, Maven- CRUD Operation
12. Java, Spring, Spring Security, Algorithm, Hibernate, Maven, Mysql Integration Application
    1. Project Modules-
        1. Customer Login
        2. Add Customer
        3. Edit Customer Information
        4. Delete Customer
        5. View Customer List
        6. Roles
        7. Admin Role
        8. DBA Role
        9. User Role
        10. Password Encryption by using Spring Security Algorithm
        11. Remember Me Functionality

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5.3. Spring Boot

1. Spring Boot Introduction
2. Spring Boot Basics
3. Spring Boot with RESTFul Service
4. Spring Boot, Spring Security – RESTful Web Service with Database Authentication

6. WEB SERVICES

6.1. SOAP Web Service
6.2. RESTful Web Service

7. INDUSTRIAL ADVANCE CONCEPTS

7.1. SVN
7.2. JIRA
7.3. Perforce
7.4. GIT
7.5. Maven
7.6. JUnit
7.7. JSON
7.8. XML
7.9. POSTMAN
7.10. Micro Services
7.11. Research and Development

8. INDUSTRIAL ADVANCE

1. JDK 1.8.0
2. Eclipse
3. Tomcat
4. MySQL
5. Maven
6. Sublime
7. HTTracke
8. STS
9. Visual Studio Code

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9. INTERVIEW QUESTIONS & PREPARATIONS

7.1. Programming practices, Concepts & Interview Preparation with live project.