

Java Full Stack Syllabus

Backend Syllabus:

A) Core java:

- 1) What is Java?
- 1) History of java.
- 2) Features of java.
- 3) Java Program Execution
- 4) JVM,JRE,JDK.
- 5) Java Installation
- 6) Eclipse Installation
- 7) "Hello"world program
- 8) Java variable
- 9) Character set
- 10) Java Data types
- 11) Operators
- 12) Keywords
- 13) If statement
- 14) If-else statement
- 15) If-else-if ladder statement
- 16) Nested if statement
- 17) Switch statement
- 18) Break

- 19) Continue
- 20) For Loop
- 21) While Loop
- 22) Do while Loop
- 23) Class & Objects
- 24) Methods
- 25) Packages
- 26) Access Specifiers
- 27) Object class
- 28) Wrapper class
- 29) Static Keyword
- 30) Final Keyword
- 31) Constructor
- 32) Super Keyword
- 33) This Keyword
- 34) Encapsulation
- 35) Inheritance
- 36) Polymorphism
- 37) Abstarction
- 38) Input Output Stream
- 39) Collection Framework
- 40) Serilization
- 41) Exception Handling
- 42) Outer & Inner class
- 43) Arrays

- 44) String
- 45) Properties File
- 46) Multithreading
- 47) JVM Memory Management
- 48) JDBC
- 49) Coding statement & debugging

B) DataBase concept(Mysql)

- 1) How to install it?
- 2) What is database?
- 3) DDL Statement
- 4) DML Statement
- 5) Join Table Query

C) Design Pattern

- 1) Singleton Design Pattern
- 2) Factory Design pattern

Advance Java:

A)Jsp:

- 1)introduction to JSP and its Advantages
- 2)JSP architecture and page directives
- 3)Scripting elememts
- 4)JSTL

5)CRUD Operation

B)Servlets:

- 1)Introduction of Servlets
- 2)Servlets life cycle and request processing.
- 3)Handling forms and user input
- 4)Integration with database
- 5)CRUD Operation

C)JDBC(Java Database connectivity):

- 1) JDBC driver
- 2) Connecting to database(Mysql)
- 3) Statements &prepared statements
- 4) Handling resultSets

D) Hibernate:

- 1) Introduction to ORM
- 2) Advantages of ORM
- 3) ORM Tools List
- 4) Hibernate Architecture
- 5) JPA
- 6) Hibernate Advantages over JDBC
- 7) Hibernate and Annotations
- 8) Hibernate Mapping

9) Hibernate Caching

E) Spring:

- 1) what is Spring
- 2) Spring Modules
- 3) What is IOC
- 4) Spring IOC Container
- 5) Bean Factory/Core Container
- 6) Application Context/Advance/J2EE
- 7) Container
- 8) Bean Scope
- 9) Dependency Injection
- 10) Setter Based
- 11) Constructor Based
- 12) Autowiring

F) Spring Web MVC

- 1) CRUD Operation

G) Spring Boot

- 1) Spring Boot Introduction
- 2) Spring Boot Features
- 3) Advantages Over Spring MVC
- 4) Creating Spring Boot Application using Maven

- 5) Using STS
- 6) Removal of XML files
- 7) Simple Application Using Spring Boot
- 8) Spring Boot Annotations
- 9) CRUD Operation

H) Rest API Creation Using Spring Boot

I) Microservices

J) Agile Methodologies

- 1) SDLC
- 2) Scrum Detail
- 3) Jira Tool

Frontend Syllabus

- A) HTML
- B) CSS
- C) Bootstrap
- D) Java Script
- E) React-Js
- F) Angular

Live Project Work