

Java Syllabus

A) Core java:

- What is Java?
- History of java.
- Features of java.
- Java Program Execution
- JVM,JRE,JDK.
- Java Installation
- Eclipse Installation
- "Hello"world program
- Java variable
- Character set
- Java Data types
- Operators
- Keywords
- If statement
- If-else statement
- If-else-if ladder statement
- Nested if statement
- Switch statement
- Break
- Continue
- For Loop
- While Loop
- Do while Loop
- Class & Objects
- Methods
- Packages
- Access Specifiers
- Object class
- Wrapper class
- Static Keyword
- Final Keyword
- Constructor

- Super Keyword
- This Keyword
- Encapsulation
- Inheritance
- Polymorphism
- Abstarction
- Input Output Stream
- Collection Framework
- Serilization
- Exception Handling
- Outer & Inner class
- Arrays
- String
- Properties File
- Multithreading
- JVM Memory Management
- JDBC
- Coding statement & debugging

B) DataBase concept(Mysql)

- How to install it?
- What is database?
- DDL Statement
- DML Statement
- Join Table Query

C)Design Pattern

- Singleton Design Pattern
- Factory Design pattern

Advance Java:

A)Jsp:

- 1)introduction to JSP and its Advantages
- 2)JSP architecture and page directives
- 3)Scripting elements
- 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

Project

- Core Project
- Live Project

Certificate