



Java Development

Course Duration: 120 Days

SNO	Module Name	Topic
1	Advance Java	<p><u>Core Java</u></p> <ol style="list-style-type: none"> 1. Java Fundamental Terms 2. Token 3. Operators 4. Input and Output Techniques 5. Control Flow Statements 6. Array 7. Array of Array 8. Programming Practice 9. String 10. StringBuffer and StringBuilder 11. String Tokenizer 12. Object Oriented Programming 13. Packages 14. Wrapper Classes 15. Lambda Function 16. Regular Expression 17. Exception handling 18. Java.io package 19. Multithreading 20. Collection 21. JUnit 22. DateTime API 23. Fundamental of SQL 24. JDBC 25. Core Java Project Development <p><u>DBMS(MYSQL)</u></p> <ol style="list-style-type: none"> 1. SQL basics 2. DML, DDL & DQL 3. DDL: create, alter, drop 4. SQL constraints: <ol style="list-style-type: none"> a. Not null, unique, b. Primary & foreign key, composite key c. Check, default 5. DML: insert, update, delete and merge 6. DQL : select



7. Select distinct
8. SQL where
9. SQL operators
10. SQL like
11. SQL order by
12. SQL aliases
13. SQL views
14. SQL joins
15. Mysql functions
16. String functions
17. Char_length
18. Concat
19. Lower
20. Reverse
21. Upper
22. Numeric functions
23. Max, min, sum
24. Avg, count, abs
25. Date functions
26. Curdate
27. Curtime
28. Now

User interface or Frontend

1. Introduction to frontend
2. HTML
3. CSS
4. JS
5. JQuery
6. Bootstrap
7. Angular

JavaEE (Servlet, JSP)

1. Servlet basics, API and Life cycle
2. Steps to create a servlet in server
3. SevletRequest and Collaboration
4. SevletConfig and ServletContex
5. Session tracking
6. Filter
7. Pagination
8. JSP basics,API and Life cycle
9. Scripting elements
10. Implicit objects
11. Directive elements



12. Action elements
13. MVC
14. Ajax
15. Downloading/Uploading
16. Camera Integration
17. Map Integration
18. Project

Data Structure with Java

1. Recursion with Array
2. Recursion ArrayList class
3. Recursion Backtracking
4. Time and space Complexities
5. Stack
6. Queue
7. Linked List
8. Binary Tree
9. Binary Search Tree
10. Heap and Map
11. Graph
12. Greedy Algorithm
13. Dynamic Programming
14. Number Theory
15. Computational Geometry
16. Text Based Processing
17. Game Theory
18. Maths
19. Constructive Alogorithm
20. Dynamic Programming using Digit
21. Bubble Sort
22. Bucket Sort
23. Comb Sort
24. Counting Sort
25. Heap Sort
26. Insertion Sort
27. Merge Sort
28. Quick Sort
29. Radix Sort
30. Selection Sort
31. Shell Sort
32. Tim Sort
33. Linear Search
34. Binary Search