

Core Java

Java Basics

- ❖ C++ vs Java
- ❖ JDK configuration
- ❖ Advance Feature in JDK9
- ❖ Installing JDK
- ❖ Classes & Methods
- ❖ Data types & variables
- ❖ Control Statement & Arrays
- ❖ Wrapper Class
- ❖ Eclipse, NetBeans
- ❖ Installing IDE

Classes & Objects

- ❖ Constructor, Overloading
- ❖ Encapsulation, Abstraction
- ❖ Inheritance, Polymorphism
- ❖ Packages, Interfaces

Multithreading

- ❖ Multithreaded Programming
- ❖ Creating & Running Threads
- ❖ Synchronization

Exception Handling

- ❖ Checked , Unchecked Exception
- ❖ Error and Assertion
- ❖ Run time & Compile time Exception
- ❖ Exception Handling
- ❖ Work Assertion with notepad
- ❖ User Define Exception handling

Collection Framework

- ❖ List, Set, Map
- ❖ Legacy classes
- ❖ Generic & Vararg

I/O

- ❖ Streams & File Handling
- ❖ Mp3 file Handling
- ❖ Virus & Trojan Softwares
- ❖ Printer Device interaction

Network Programming

- ❖ TCP/IP basics
- ❖ IP Addressing
- ❖ TCP/UDP Sockets
- ❖ Networked Applications
- ❖ Chat Server
- ❖ Java Mail Api

Lambda Expression

- ❖ Lambda Expression
- ❖ Introduction
- ❖ Lambda Expression Fundamental
- ❖ Functional Interface
- ❖ Block Lambda Expression
- ❖ Generic Functional Interface
- ❖ Passing Lambda Expressions as Argument
- ❖ Lambda Expression and Exception
- ❖ Lambda Expression and Variable Capture

Design Pattern

- ❖ Single Ton Design pattern
- ❖ Factory Design pattern
- ❖ Pojo Class
- ❖ Java Beans
- ❖ Dao Design pattern
- ❖ Tao Design pattern
- ❖ Business Layer Design pattern

Interface

- ❖ Default Method Fundamentals
- ❖ Use static Methods in an Interface

Inner Classes

- ❖ Regular & Normal inner Class
- ❖ Method Inner Class
- ❖ Static Inner Class
- ❖ Anonymous Inner Class

Enumeration

- ❖ Enumeration Fundamentals
- ❖ Auto boxing
- ❖ Annotations

Java 9

- ❖ What is Jshell?
- ❖ How to work on Jshell
- ❖ Java 9 updations

GUI In Java

Applets & AWT

- ❖ Creating Applets
- ❖ GUI basics
- ❖ Abstract Window Tool Kit

Swings

- ❖ Swings Basics
- ❖ Swings vs AWT
- ❖ Creating GUI Applications

Swings components

- ❖ Forms, Panel & Layouts
- ❖ Menus, Menu Bars, Tabbed Pane, Dialog boxes, Tables, Progress Bar, Slider, Swing containers

Databases

- ❖ Introduction to SQL
- ❖ Database design concepts
- ❖ RDBMS concepts
- ❖ SQL queries

- ❖ SQL Join Methods
- ❖ Microsoft Access
- ❖ Mysql, Oracle
- ❖ SQL Server 2005,2008,2010

- ❖ JDBC/ODBC bridge database
- ❖ Connectivity using DSN
- ❖ MySql connectors
- ❖ Prepared Statements

