



JAVA

Java Pearls (Core Java)

Duration: 1 month

Fees: 4000 Rs.

Course Objective:

Some Facts about Java:

Finding of ZDNet Magazine reviews indicate that Nearly three-quarters of enterprise software development managers are using Java today.

Nearly 55% Pune's Software jobs demand expertise in Java as a base language.

Nearly 60 % of academic projects are developed in Java.

This course has been designed keeping the wannabe Java programmer in mind.

Both Students and professionals alike will benefit from the course, giving them a solid understanding of how to program using the Java language and unleash its true potential.

Contents:

- Introduction to the lingua-franca of Internet programming.
- Execution of Java using the JVM
- Different Types of Java Programs: Applets, applications, servlets, beans, EJBs, etc.
- The Java Language Fundamentals
- Writing Object Oriented programs using Java
- Arrays and Strings
- Packages and interfaces
- Exceptions
- Multithreading
- I/O Streams
- Network programming using Sockets
- Writing Applets and displaying animation
- Graphical User Interface (GUI) design using Swing
- JDBC
- Emerging trends in Java/ Product Development Overview

Hands-on exercises:

Total 45 assignments at three levels of complexity:

Low

Medium

High

AND

Value added career guidance with Job Assistance



Java Emeralds **(J2EE)**

Duration: 1 1/2 month

Fees: 4000 Rs.

Course Objective

The J2EE Programming training course provides an overview of the J2EE architecture, and introduces delegates to the development and implementation of scalable distributed applications using Enterprise JavaBeans (EJB), Servlets, and Java Server Pages (JSP).

The rapid development of the Java Enterprise technology shows that Java has an important part to play in modern business. The growing number of companies offering Java Enterprise servers, and the use of Java for the development of reference implementations for XML and other W3C technologies illustrate the increasing penetration of Java.

Contents:

Enterprise Java overview

- What is Enterprise Java?
- Legacy systems
- JDBC
- Servlets
- JSP
- Distributed applications
- Security
- Scalability

Java 2 Enterprise Edition

- J2EE Overview
- Reference Implementation
- Services
- EJB/Web containers
- HTTP/HTTPS
- COS Naming/JNDI
- Containers and Servers
- Web containers
- Servlets

- JSP
- EJB containers
- CMP Entity
- BMP Entity
- Session

Web applications

- Building web applications
- Storing user data
- Interacting with the internet

Servlets

- Servlet, GenericServlet and HTTP Servlet
- Responding to HTTP
- POST
- GET
- Storing user data
- Processing form data

Java Server Pages

- Generic displays
- JSP versus Servlets
- JSP
- Actions
- Directives
- Expressions
- Displaying user and form data

Naming services

- Directory services
- LDAP and DNS
- JNDI
- Contexts and binding
- Initial Contexts and lookup

Enterprise Java Beans

- Different types of EJB
- Sessions and Entities
- CMP, BMP, Message Bean
- Stateless and stateful sessions
- Home interfaces
- Remote interfaces
- Bean implementations

Container managed persistence

- Building an EJB
- Constraints
- Mapping methodologies
- 1-1, 1-*, many-many

EJB Clients

- Connecting to an EJB
- Naming contexts

Session Beans

- Stateless sessions
- Stateful sessions

EJB Methods

- Standard EJB methods
- Instance pooling & processing

Database Connectivity

- SQL Overview
- JDBC

Bean managed persistence

- Building an EJB
- Constraints
- Accessing Data Sources
- Connection pooling

Java Mail

- Creating and sending mail
- SMTP, POP and IMAP

Java Messaging Service

- Messaging Systems
- Topics (Pub/Sub)
- Queues (P2P)

Transactions

- Transactions overview
- Declarative transactions

Security

- Concepts
- Securing an EJB application

Introduction to Struts, SOAP.



Java Gems **(J2ME)**

Duration: 30 days

Fees: 7000 Rs.

Contents:

Java Environments Comparison

J2ME (Java 2 Micro Edition)
J2SE (Java 2 Standard Edition)
J2EE (Java 2 Enterprise Edition)

J2ME specifics

ME components: KVM, J2ME, CLDC, MIDP

- Comparison of different ME platforms

Profiles

- Overview of profile system

Architecture

- How the J2ME works

Differences between J2ME environments

- Comparisons between J2ME and Personal Java

MIDP

Mobile information device profile

Creating MIDP applications

Midlet suites and deployment

MIDP GUI

Graphical User Interfaces with MIDP

- Displays, Commands, Pointers, Screens
- Animations and drawing

Data structures

- Storing data in Java
- Hashtable and Hash Map
- Vector and List
- Comparison between different types
- Inner classes
- Using inner classes
- Types of inner classes
- Anonymous, Inner, Member, Static
- Exceptions, IO and Networking
- Error handling
- Streamed IO
- Socket IO (TCP/IP)
- J2ME IO
- Connector architecture
- Networking with HTTP
- Threading
- Creating threads in Java
- Synchronization

Fees : 11,000 (including All modules)

OR

Fees : 6000 (only core + Advance java)