



JAIN UNIVERSITY

DEPARTMENT OF MCA & MS (IT)

VALUE ADDED PROGRAMME

Course Name: Advanced Java
Date: 06-01-2014 (7 days)
Time : 9.00 am – 4.00 pm

Venue: Department of MS(IT)
JC Road Campus
Jain University

Objective: Students will be able to understand the web, web development by planning an interactive web site design the web site and manage the web site using j2ee API

Pre-requisite: Creative thinking and critical logic to design a web site. Strong foundation in object oriented concepts and core java .

Module1:

Console Application Development:

- Introduction to Java
- Language basics
- Java API
- Swing Application Development

Module 2:

JDBC

- Introduction to JDBC
- Architecture & Querying with JDBC
- Stage 1: Connect
- Stage 2: Query
- Stage 3: Process the Results
- Stage 4: Close
- The DatabaseMetaData Object
- The ResultSetMetaData Object
- Mapping Database Types to Java Types
- The PreparedStatement Object
- The CallableStatement Object
- Using Transactions
- Summary of JDBC Classes
- Summary
- Examples

Module 3:

J2EE Architecture and Servlet

- Introduction to J2EE
- J2EE Overview

- Why J2EE?
- J2EE Architecture
- J2EE APIs
- J2EE Containers
- Introduction to Servlet
- What is a Servlet?
- Building a Servlet using the Servlet API
- Servlet Life Cycle
- Uses of HTTP Servlets
- The init() Method
- The service() Method
- The destroy() Method
- Handling HTTP Get requests
- The Servlet Interface
- ServletConfig Interface
- ServletContext Interface
- Servlet chaining
- The Cookie class
- Session Tracking
- Summary
- Examples

Module 4:

Java Bean and Java Server Pages Technology (JSP)

- Basic JSP Architecture
- Life Cycle of JSP (Translation, compilation)
- JSP Tags and Expressions
- Role of JSP in MVC-2
- Element of JSP
- JSP Implicit Objects
- Tag Libraries
- JSP Expression Language (EL)
- Using Custom Tag
- JSP Capabilities:
 - Exception Handling
 - Session Management
 - Directives
 - JSP with Java Bean
- Summary
- Examples

Module 5:

Struts Framework:

- What is Struts?
- Struts Architecture
- Struts classes - ActionForward, ActionForm,
- ActionServlet, Action classes
- Understanding struts-config.xml

- Understanding Action Mappings
- Struts flow with an example application
- Struts Tiles Framework.
- Struts Validation Framework
- Summary
- Examples

Others:

Awareness to Other J2EE Technologies:

Java Mail

JTA

Web Services

JMS

ANT

Log4J

JSF

Hibernate

Spring Framework

Design Pattern

Module 6:

Case Study

For Contact:

Dr.Suchithra

Programme Coordinator

Mob:+91-9980680442

Email:suchthra.suriya@gmail.com