

JAVA TRAINING

If you are looking for **JAVA** Training, then Tek Classes is the right place to get the knowledge. Learn the most fundamental skills of JAVA and kick start your growth!!

Course Overview

Little about JAVA and JAVA Training

Learn JAVA from Tek Classes. We have designed the JAVA course content and syllabus based on industry expectations to achieve everyone's career goal. Take up the JAVA Training to seek your dream career!!

Modes of Training: Tek Classes offer JAVA training in classroom, online and self-paced video modes.

JAVA Online Training in Bangalore– We offer online JAVA Tutorials through various online technologies like GoToMeeting and WebEx. If you are a working professional then learning JAVA online from Tek Classes is the best choice. Here, you will get quality guidelines and real-time projects at your own time. We also support our students 24*7 for any assistance.

JAVA Training in Bangalore – We offer the best classroom JAVA course in Bangalore. We have quality skilled and industry expert trainers to train you on different advanced topics . They are good at providing real time examples and practical scenarios while explaining concepts. Join the best JAVA Training Institute in Bangalore, join Tek Classes.

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Core Java

- Basics-oops concepts
- A simple java program-compilation and execution
- Class
- Object-definition and creation
- Primitive data types
- Operators
- Typecasting-necessity and usage
- Functions-passing parameters, return data types etc
- Static keyword-meaning and purpose
- Interpreting system out. println
- Polymorphism-static and dynamic
- Method overloading and method overriding
- Constructors-this and super keyword
- String class and string buffer class
- Arrays-declaration and usage
- Command line arguments
- Inheritance-types, usage, 'final' keyword
- Super class reference-subclass object rule
- Interfaces-late binding and early binding
- Abstract class
- Packages
- Access specifiers -public, private, protected and default
- Access modifiers
- Inner classes
- Static and non-static blocks
- Exception handling-try, catch, throws, throws, finally
- Keywords and their usage, user defined exceptions
- Multithreading
- Streams {i/o and files}
- Networking
- Wrapper classes
- Collection framework
 - New features in java 1.6

Advanced java

JAVA DATABASECONNECTIVITY(JDBC)

Getting started with web application in Java

- Introduction to Web Application,
- Need for Web Application,
- Technologies used in Web Application,
- Web Architecture Models --- Model-1 and Model-2, Introducing MVC Architecture

Introduction to Servlets

- Introducing CGI,
- pros & cons of CGI,
- What is Servlet?
- Need of Servlet,
- About Servlet Container,
- Servlet API,
- About java.
- servlet. Servlet interface,
- Servlet Lifecycle,
- About Servlet Config,
- About Generic Servlet Configuring Servlets on Tomcat 6.x, BEA WebLogic 8.1/9.x/10 (On Windows/Linux),
- IBM WebSphere 6.0 and Primate 4.1 servers

Request Processing and Features of HTTP

- About Servlet Request and Servlet Response,
- About Request Parameters,
- About Initialization Parameters,
- Need of initialization parameters,
- About Request Dispatcher,
- Using Request Dispatcher to Forward & Include,
- When to use Include & Forward,
- Difference between Include & Forward,
- Request Attributes,
- Understanding Http basic,
- Understanding HTTP Servlet,
- Http Servlet Request & Http Servlet Response

Session Tracking

- Need to maintain client data,

- URL Rewriting,
- pros & cons of URL Rewriting,
- benefits of URL Rewriting,
- When to use URL Rewriting,
- Hidden Form Fields,
- Pros & cons of Hidden Form Fields,
- When to use Hidden Form Fields,
- Cookies, Pros & Cons of Cookies,
- When to use Cookies,
- Http Session,
- Pros & Cons of Http Session,
- When to use Http Session,
- Context Attributes,
- Need of context attributes,
- How to configure context attribute,
- How to access context attribute,
- Example demonstrating the usage of Context Attributes,
- About various scopes,
- When to use which scope,
- Single Thread Model,
- Need of synchronization in Servlets,
- Using Single Thread Model

Introducing Filters, Listeners & Wrapper

- Need of filters,
- Filter Interception Design Pattern,
- Changes in Servlet 2.4 in filter configurations, Configuring Filters to work with Forward & Include, About Listeners, what are Listeners?
- Need of event programming and importance of Listeners, The Various Listeners (Servlet Context Listener, Servlet Context Attribute Listener, Http Session Listener, Http Session Binding Listener, Http Session Attribute Listener, Http Session Activation Listener),
- About Servlet Wrappers (Servlet Request Wrapper,
- Servlet Response Wrapper,
- Http Request and Response Wrappers)

Servlet 2.5 Features

Security

- Introducing Security (JAAS),
- Authentication,
- Authorization,
- Data Integrity,
- Introducing Web Security,
- Http Authentication Mechanism,
- Http Basic Authentication model,

- Http FORM based Authentication model,
- Http Digest Authentication Model,
- Declarative Security,
- Working with declarative security in web application, Programmatic Security,
- Working with programmatic security in web application

Introducing to JSP

- JSP Introduction,
- Difficulties in using Servlets to build huge views,
- Need for alternative approach to build dynamic web pages,
- Introducing tag based approach,
- JSP architecture,
- JSP Lifecycle (Translation, Compilation, Initialization, Request processing, Destroying)

Introducing JSP Basic Tags and Implicit Objects

- Scripting Tags (Script let tag, Declarative Tag, Expression Tag), Implicit Objects,
- Need of Implicit Objects,
- About all the implicit objects (request, response, out, page, application, session, config, exception),
- Directive Tags (Page directive, include directive, taglib directive)

JSP Action tags and Java Beans

- What is Java Bean?
- Need of java Beans,
- Advantages of using Java Beans,
- Action Tags (include, forward, param, useBean, setProperty, getProperty, plugin, params, fallback)
- Differences between directive include and action include

Enhancing the JSP tags support

- JSP Custom Tags,
- Need of custom tags,
- Empty Tags,
- Tag Handler Life Cycle,
- Body Content Tag,
- Body Tag Handler Life Cycle,
- Iteration Tags,
- Iteration Tag Handler Life Cycle,
- Simple Tags]

Internationalization

- Introduction to Internationalization,
- Need of Internationalization,

- Internationalizing Web Application

Web Design Patterns

- Web Tier Design Considerations,
- MVC (Model View Controller),
- Filter Interception,
- Front Controller,
- Composite View,
- Business Delegate,
- DAO (Data Access Object),
- DTO (Data Transfer Object),
- Command Pattern, Application implementing MVC architecture

Introduction to mvc 1 and mvc 2 architecture

1. J2EE

- RMI
- EJB - session beans, entity beans, message driven beans
- Introduction to struts 1.3
- Design patterns

2. STRUTS-

- Front controller design pattern
- Application controller design pattern
- What is struts?
- What is framework?
- Need of struts framework
- Struts architecture
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- The elements of struts architecture
 - a. Action servlet
 - b. Struts configuration file o Request processor
 - c. Action class
- Simple struts application
- Form beans and types of form beans
- Validations and validation framework
- internationalization
- Struts modules – request processor, module config, request utils
- Struts plug-in
- Types of action class
- Exception handling in struts
- Tiles framework
- Examples of all the above topics using an IDE [my eclipse]
- New features in struts 1.3

3. SPRING-

Exclusive Discussion on spring

- Spring-core
- Spring-Jdbc
- Spring-mvc
- Spring-webmvc
- springJee Module
- springOrm
- SpringAop

4. HIBERNATE-

- What is Orme?
- What are the Main Features of ORM?
- Why Object/Relational Mapping(ORM)?
- Understanding Hibernate Architecture
- Configuration
- Session Factory
- Session
- Query
- Criteria
- Hibernate Configuration
- Hibernate Mappings
- Persistent Classes
- Using Hibernate to Perform Basic Persistent Operations
- Step1: Prepare Configuration Object
- Step2: Build Session Factory
- Step3: Obtain Session
- Step4: Perform Persistence Operations
- Step5: Close the Session
- Working with Hibernate to perform Basic CRUD Operations...
- Understanding Persistent Classes Mapping
- Problem of Granularity
- Working with Component Types
- Problem of Subtypes
- Table per Class Hierarchy
- Implementing Table per Class Hierarchy
- Table per Subclass
- Table per Concrete Class
- Problem of Relationships
- One-to-One
- One-to-Many

- Many-to-Many
- Understanding Hibernate Query Language(HQL)And Criterion Api
- Introducing HQL
- Using Hibernate Apl to Execute Hql Queries
- Obtaining a Query Instance
- Cusomizing the Object
- Executing the Query
- Preparing Hql Queries to Retrieve Persistent Objects
- The from Clause
- The Select Clause
- Using Constuctor Expression in SELECT Clause
- Using Aggregate Select Expression in SELECT Clause
- The Where clause
- Positional Parameters
- Named parameters
- Named Queries
- Using Criterion API to Build Queries
- Adding Restrictions to Criteria
- Using HQL to perform Bulk Update and Delete Operations
- NATIVE SQL
- Implementing Servlets with Hibernate
- Implementing Servlets with Hibernate and Ejb
- Implementing Struts with Hibernate
- Implementing Spring with Hibernate
- Criteria Api
- relationships (one-many, many-one)
- inheritance mapping
- caching

5-WEB SERVICES-

- Service-Oriented Architecture with Java Web Services
- An Overview of Java Web services
- Basic SOA Using REST
- The Role of WSDL, SOAP, and Java/XML Mapping in SOA
- The JAXB 2.0 Data Binding
- JAX-WS—Client-Side Development
- JAX-WS 2.0—Server-Side Development
- WSDL-Centric Java Web Services with SOA-J
- Springs with web services
- Jax-rs (restful webservice)