



Advanced Java

JDBC 4.X

- Introduction to JDBC
- The DriverManager class
- Procedure to develop applications in Eclipse IDE
- Applets
- Architecture Diagrams of All Types of JDBC Drivers
- Types of JDBC Statement Objects
- Working with Conventional & Non-Conventional Database Softwares
- Working with Date values
- Working with Large Objects
- Working with Callable Statement
- Procedure to Develop Desktop icon
- Understanding Different Types of ResultSets
- Understanding JDBC MetaData
- Batch Updation/Batch Processing
- Working With Properties Files
- JDBC Versions & Features
- Working With JDBC Connection pool
- Save Point
- RowSets & Types of RowSets
- Type 5 JDBC Driver
- Type 3 JDBC Driver

Servlet 4.x

- Need of Web applications
- Need of Web Server
- Web application development setup
- Tomcat Server Basics
- Basics of web Server and Servlet Container

- Html to Servlet Communication
- Form validations
- Different types of form components
- Working with multiple Hyperlinks
- Working with multiple Submit Buttons
- GET Vs POST
- Servlet Life Cycle
- javax.servlet.http package
- War file creation
- War Vs jar
- Working with Application Servers
- Servlet to DataBase Software Communication
- Servlet Config Vs Servlet Content
- Working with init params and context params
- Working with Server Managed JDBC connection pool
- Java Bean
- Servlet Communication
- Forward and Include Mechanisms
- Send Re-direction
- Servlet Attributes
- File Uploading & File Downloading
- Annotation based servlet programming
- Security in Web application
- Session Tracking
- Servlet Listeners
- Thread safety in servlet programming
- Understanding protocol http
- Servlet Filters
- Servlet Wrappers
- Different types of url patterns
- Dynamic Registration of servlet

JSP 2.x

- Disadvantages of Servlets
- Introduction to JSP
- Creating dynamic Web component with JSP
- Phases Of JSP Execution
- JSP Life Cycle
- Scripting elements
 - ❖ Scriptlet
 - ❖ Declaration
 - ❖ Expression
- XML syntax for JSP elements
- JSP to DataBase communication
- JSP directives page, include and taglib
- JSP implicit objects
- JSP scopes
- JSP Action Tags
- Include and forward mechanism
- Using a Java bean in a jsp
- JSP Model 1 architecture
- JSP Model 2 (MVC) architecture
- Mini Projects Discussion
- Custom Tag Development
- Classic Tags, Simple Tags
- Error Handling in a jsp
- JSTL
- Expression Language
- Processing XML in a jsp