

Day 10 Revisit (Servlets & JSP)

- Servlets – Is a Class which gets executed in the server
- Servers – Web/Application/Database Server
- WebServer – Apache Tomcat (Popular)
- Application Server – Glassfish, JBOSS, WebLogic etc.,
- DB Server – MySQL, MS-SQL, MongoDB, Postgres etc.,
- Types of Servlet – Generic Servlet (For any protocol) & Http Servlet (Specific for Http)
- Servlet LifeCycle (Init, service – doGet(),doPost(), destroy)
- HttpRequest, HttpResponse
- PrintWriter Object – response.getWriter
- setContentType
- reading parameters from URL – request.getParameter()
- JSP – Java Server Pages (Server Side Coding)
- Servlets & JSP are used to create dynamic content in web.
- Servlet – Embedding HTML code inside java code
- JSP – Embedding JAVA code inside html (Easy to create web pages in this way)
- JSP tags – scriptlet(<% %>), declarative(<%! %>), expression (<%= %>), directive <%@ %>, JSP action tags <jsp:[action_name]> </jsp:[action_name]>
- JSTL – JSP standard Tag Library
- CRUD operations using JSP & JSTL
- used setDataSource, Query, Update from SQL JSTL

Day 11 Agenda

Spring, IoC, DI, Beans, Annotations based Configuration

Spring – Is a very popular JAVA based framework, used to create enterprise level, loosely coupled java applications in easy way.

XML – Is both case and space sensitive.

Configuring in XML file is a complex process.

It used Power of POJO class. – Plain Old Java Object (A Class which is not extending other class nor implementing any Interfaces)

Spring uses two important design pattern.

IoC – Inversion of Control (Ola cab/Own vehicle, Event Mgmt Team/Arranging everything ourself)

DI – Dependency Injection (Injecting required objects at runtime)

SPRING – IoC Container

Spring Framework Modules

- 1) Spring Core
- 2) Spring Web (Spring MVC)
- 3) Spring AOP (Aspect Oriented Programming)
- 4) Spring Security (Access Control)
- 5) Spring Data (Interacting to any RDBMS)
- 6) Spring Test
- 7) Spring Messaging
- 8) Spring Transaction Management

Spring Framework is called as Framework of Frameworks.

It supports and easily integrates with other framework.

Spring Configurations

- 1) XML based configuration
- 2) Annotation based Configuration

Types of Injection

- 1) Constructor Injection
- 2) Setter Injection

<https://www.javatpoint.com/steps-to-create-spring-application>

@Bean (Method Level Annotation)

@Component - (Class Level Annotation)

<https://spring.io/guides#gettingStarted>

<https://docs.spring.io/spring-framework/docs/current/javadoc-api/index-files/index-1.html>

<https://springframework.guru/java-bean-properties-binding/>

Creating Runnable JAR & Running it in command prompt

Creating WAR and Deploying it in Tomcat