**Introduction**

**JSP** technology is used to create dynamic web application same like Servlet technology. It is another web technology given by Sun MicroSystem for the development of dynamic web pages an the client browser. It provides a tag based approach to develop java web components.

JSP have **.jsp** extension, we can directly access these JSP pages from client system browser window. Because jsp pages are contains outside of the WEB-INF folder.

A JSP page consists of Html tags and JSP tags. The jsp pages are easier to maintain than servlet. It provides some additional features such as Expression Language, Custom Tag etc.

A JSP is called as page but not program because a JSP contains totally tags. Every JSP is internally converted into a Servlet by the server container.

## Why JSP ?

The first technology given for the development of web application is CGI. In CGI have some drawback, So Sun MicroSystem develop a new technology is servlet. But working with Servlet Sun MicroSystem identify some problem, Servlet technology need in depth java code and Servlet is failed to attract the programmer.

To overcome the problem with Servlet technology we use jsp technology.

## JSP Tag

A JSP page contains both html tags and JSP tags. Html tags will produce static output and JSP tags will produced dynamic output. Because of JSP tags we called as JSP is dynamic web page.

**Features of JSP**

JSP are tag based approach to develop dynamic web application. JSP have all the features of Servlet because it is internally Servlet. It have following feature these are;

* Extension to Servlet
* Powerful
* Portable
* Flexible
* Easy
* Less code than Servlet

**Extension to Servlet:**JSP is Extension to Servlet, it have all the features of servlet and it have also implicit objects, predefined tags, expression language and Custom tags in JSP, that makes JSP easy to develop any application.

**Powerful:**These are internally Servlet, means consists byte code, so that all java features are applicable in case of jsp like robust, dynamic, secure, platform independent.

**Portable:**JSP tags will process and execute by the server side web container, So that these are browser independent and j2ee server independent.

**Flexible:**Allows to defined custom tags, the developer can fill conferrable to use any kind, framework based markup tags in JSP.

**Easy:**JSP is easy to learn, easy to understand and easy to develop. JSPs are more convenient to write than Servlets because they allow you to embed Java code directly into your HTML pages, in case of servlets you embed HTML inside of Java code.

**Less code than Servlet:**In JSP, we can use a lot of tags such as action tags, jstl, custom tags etc. that reduces the code.

**Jsp First program**

Here i will give you a simple jsp example. First you write your first jsp code on any editor and save with .jsp extension like below;

**Save and Compile jsp program**

JSP program must be save with the **.jsp** extension. And for compile jsp code simply follow step of compilation servlet code.

**Example**

**<html>**

**<body>**

<% **out**.**print**("Hello word"); %>

**</body>**

**</html>**

**Result**

Hello word

**How to run jsp program**

After write your jsp code, deploy jsp program in your root directory and start server. Follow below steps to run jsp code.

* Deploy jsp code in root directory
* Start Server
* Visit on browser or give request with url like below

**Syntax**

http://localhost:portnumber/RootDirectory/jspfile

**Example**

http://localhost:2015/jspapplication/index.jsp