

01_JSP 소개

주요 목적

처음으로 JSP 웹 애플리케이션 만드는 방법 배우기

로드맵

- JSP로 시작하기
- JSP 스크립팅 요소 알아보기
- JSP로 HTML 폼 데이터 읽기
- 쿠키와 세션으로 애플리케이션 상태 관리
- 기타 등등

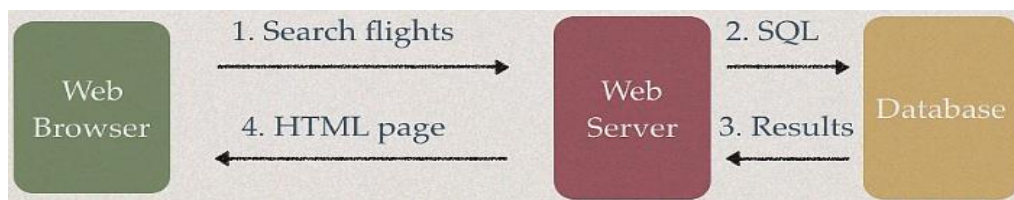
02_JSP-서블릿 개요

주제

- 웹 애플리케이션이란?
- JSP와 서블릿이란?
- 어떤 유형의 앱을 만들 수 있는가?

가. 웹 애플리케이션이란?

사용자 액션을 기반으로 HTML 페이지가 **동적**으로 생성되는 웹 사이트



나. 데모 - 여행 웹 애플리케이션

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Departing May 16

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6:59pm - 3:30pm ⁺²

New York (LGA) - Seoul (ICN)

American Airlines

31h 31m (1 stop)

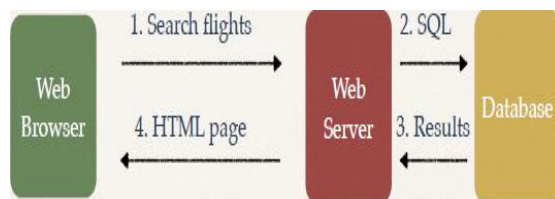
12h 16m in Dallas (DFW)

\$2,394

1 left at

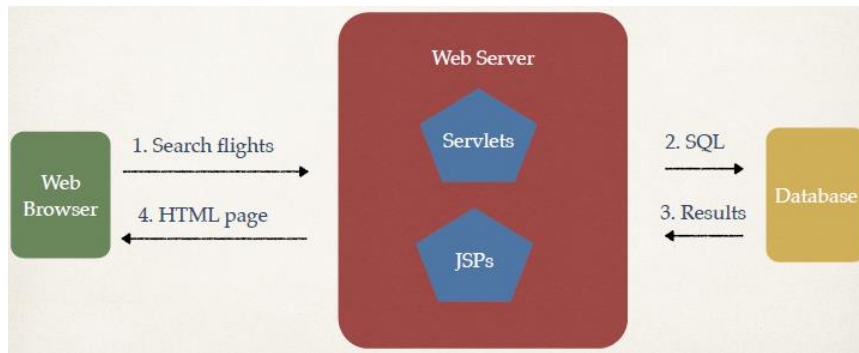
Roundtrip per traveler

Carry-on included



다. JSPs와 서블릿이란?

- ❖ 웹 서버상에서 실행하는 자바코드
- ❖ 보통 HTML 폼으로부터 사용자 액션 읽기
- ❖ 작업 실행 후, 동적으로 생성되는 HTML 페이지 돌려받기



핵심 빌딩 블록

- ❖ JSPs와 서블릿은 기업용 자바(Java EE)의 핵심 컴포넌트
- ❖ 유명한 MVC 프레임워크는 실질적으로 JSP와 서블릿 위에 구축
- ❖ 스프링

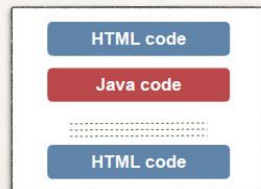
03_JSP 개발환경 설정 개요

- 필수 소프트웨어 Required Software: Java Development Kit (JDK)
- 빌드 툴
 1. 자바 애플리케이션 서버: 톰캣(9.0)
 2. 자바 통합 발 환경: 이클립스(2020-12)

04_helloworld JSP 튜토리얼

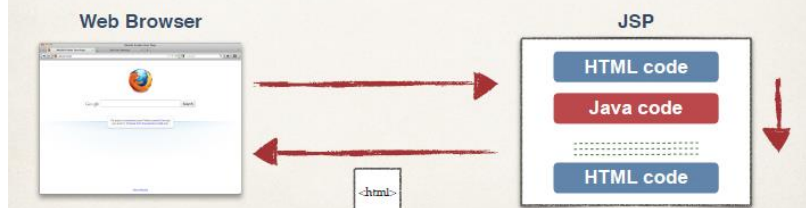
What is a JSP file?

- An HTML page with some Java code sprinkled in...
- Include **dynamic content from Java code**



Where is the JSP processed?

- JSP is processed on the server
- Results of Java code included in HTML returned to browser



Where to place JSP file?

- The JSP file goes in your **WebContent** folder
- Must have .jsp extension



Show me the code!

File: helloworld.jsp

```
<html>
<body>

<h3>Hello World of Java!</h3>

The time on the server is <%= new java.util.Date() %>
JSP Expression

</body>
</html>
```

실습

05_JSP 표현식 튜토리얼

JSP Scripting Elements

Element	Syntax
JSP Expression	<code><%= some Java expression %></code>
JSP Scriptlet	<code><% some Java code: 1 to many lines %></code>
JSP Declaration	<code><%! variable or method declaration %></code>

JSP Expression

- Compute an expression
- **Result** is included in HTML returned to browser

`<%= some Java expression %>`

JSP Expression - Example

JSP file

The time on the server is `<%= new java.util.Date() %>`

Generated HTML

The time on the server is Sun Nov 08 21:45:24 EST 2015

JSP Expression - More Examples

Converting a string to uppercase: `<%= new String("Hello World").toUpperCase() %>`

`

`

25 multiplied by 4 equals: `<%= 25*4 %>`

`

`

Is 75 less than 69? `<%= 75 < 69 %>`

Converting a string to uppercase: HELLO WORLD

25 multiplied by 4 equals: 100

Is 75 less than 69? false

실습

06_JSP 스크립틀릿 튜토리얼

JSP Scriptlets

- Insert 1 to many lines of Java code
- To include **content** in the page use: **out.println(...)**

```
<%  
    // some lines of Java code  
%>
```

JSP Scriptlet - Example

```
<h3>Hello World of Java</h3>  
  
<%  
    for (int i=1; i <= 5; i++) {  
        out.println("<br>I really luv2code: " + i);  
    }  
%>
```

Hello World of Java

I really luv2code: 1
I really luv2code: 2
I really luv2code: 3
I really luv2code: 4
I really luv2code: 5

JSP Scriptlet – 베스트 프렉티스

- JSP내 스크립틀릿의 양을 최소화
- 기능을 여러 클래스로 분리: MVC 패턴 사용

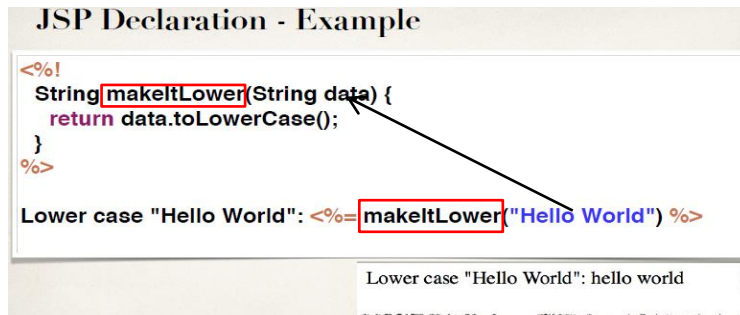
실습

07_JSP 선언 튜토리얼

<%!

// declare a method

%>

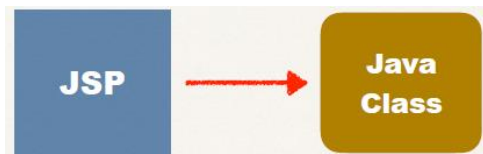


JSP Declarations – 베스트 프랙티스

- JSP내 함수선언 최소화
- 기능을 여러 클래스로 분리: MVC 패턴 사용

실습

07_JSP로부터 자바클래스 호출 튜토리얼



To Do List

1. 자바 클래스 만들기
2. JSP에서 자바 클래스 호출

실습

08_JSP 내장 개체 튜토리얼

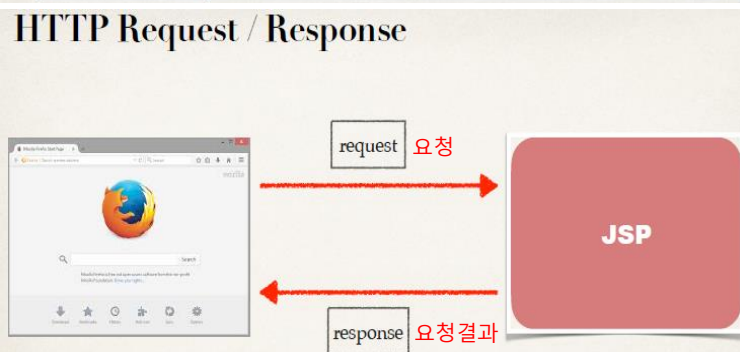
내장 서버 오브젝트

- 객체를 선언하거나 생성하지 않고 JSP 페이지에서 직접 호출 가능한 객체
- List of commonly used JSP objects

Object	Description
request	Contains HTTP request headers and form data
response	Provides HTTP support for sending response
out	JspWriter for including content in HTML page
session	Unique session for each user of the web application
application	Shared data for all users of the web application

HTML 데이터 쓰기 객체

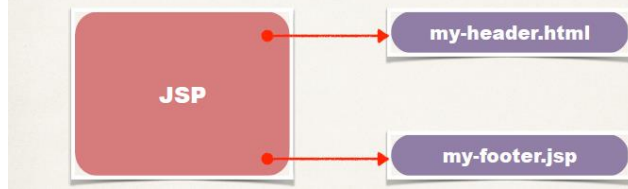
로그인 상태, 장바구니 상태 등



실습

09_JSP 파일 포함하기 튜토리얼

Including Files



```
<jsp:include page="my-header.html" />
```

```
<jsp:include page="my-footer.jsp" />
```

실습