Spring Day 9

Spring

▼ AJAX in Spring MVC

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib prefix="form" uri="http://www.springframework.org/tags/form"%>
<script src="https://code.jquery.com/jquery-3.6.3.min.js" integrity="sha256-pvPw+upLPUjgMXY0G+8O0xUf+/Im1MZjXxxgOcBQBXU=" crossorig

<head>
  <title>cars</title>
  <%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
      <meta charset="utf-8">

</head>
<body class="text-center">
<div class="alert alert-dark" role="alert">
<div class="container"><h1>차량 상세보기</h1></div>
</div>


  <div class="container">
    <div class="row" align="center">
        <h3>${car.cid}</h3>
        <p>${car.cname}
        <p>${car.cprice}만원
        <p>${car.ccate}
        <p>${car.cdesc}


        <p>
        <form:form name="addForm" method="put" target="cart">
<%--        <a href="javascript:addToCart('/cart/add/${car.cid}')" class="btn btn-primary">제품주문 &raquo;</a> --%>

<!--        기존 방식을 AJAX로 적용 -->
        <a href="javascript:addCartFunction()" class="btn btn-primary">제품주문 &raquo;</a>
        <a href="<c:url value='/cart' />" class="btn btn-warning">장바구니 &raquo;</a>
        <a href="<c:url value='/cars' />" class="btn btn-success">제품목록 &raquo;</a>
        </form:form>

    </div>
  </div>




</body>

<iframe name="cart" style="display: none;"></iframe>

<script type="text/javascript">

// //구매하려는 제품을 장바구니로 보낼 때 JS를 이용하여 화면전환 없이 submit()을 실행한다.
// function addToCart(action) {
//   document.addForm.action = action;
//   document.addForm.submit();
//   alert("제품이 장바구니에 추가되었습니다.");
// }

function addCartFunction() {
  $.ajax({
    type:"POST",
    url:"/cart/ajaxAdd",
    data:{cid:"${car.cid}"},
    beforeSend : function(xhr)
        {   /*데이터를 전송하기 전에 헤더에 csrf값을 설정한다*/
            xhr.setRequestHeader("${_csrf.headerName}", "${_csrf.token}");
        },
    success:function(result) {
      alert("제품이 장바구니에 추가되었습니다.")
    },
```

```
    error:function(request, status, error) {
      alert(request.status + " " + request.responseText);
    }

  })
}

</script>




</html>
```

💡 **Spring Security**를 적용하면 **[POST 방식을 이용하는 경우]**에 **csrf** 프로텍션이 적용되기
때문에 반드시 **csrf** 토큰을 같이 보내주어야 한다.

```
function addCartFunction() {
    $.ajax({
        type:"POST",
        url:"/cart/ajaxAdd",
        data:{cid:"${car.cid}"},
        beforeSend : function(xhr)
        {    /*데이터를 전송하기 전에 헤더에 csrf값을 설정한다*/
            xhr.setRequestHeader("${_csrf.headerName}", "${_csrf.token}");
        },
        success:function(result) {
            alert("제품이 장바구니에 추가되었습니다.")
        },
        error:function(request, status, error) {
            alert(request.status + " " + request.responseText);
        }

    })
}
```

```
beforeSend : function(xhr)
        {    /*데이터를 전송하기 전에 헤더에 csrf값을 설정한다*/
            xhr.setRequestHeader("${_csrf.headerName}", "${_csrf.token}");
        }
```

▼ Spring Security Taglibs in Spring MVC

회원, 비회원의 따른 **header.jsp** 화면 설정.

의존성 주입.

Spring Security Taglibs » 5.4.6

Spring Security

License	Apache 2.0
Categories	JSP Tag Libraries
Tags	security spring jsp taglibs taglib
Organization	spring.io
HomePage	https://spring.io/spring-security
Date	Apr 12, 2021
Files	jar (18 KB) View All
Repositories	Central Gradle Releases
Ranking	#1523 in MvnRepository (See Top Artifacts) #3 in JSP Tag Libraries
Used By	290 artifacts
Vulnerabilities	Vulnerabilities from dependencies: CVE-2022-22978 CVE-2022-22976 CVE-2022-22971 View 10 more ...

```
<!-- https://mvnrepository.com/artifact/org.springframework.security/spring-security-taglibs -->
<dependency>
    <groupId>org.springframework.security</groupId>
    <artifactId>spring-security-taglibs</artifactId>
    <version>5.4.6</version>
</dependency>
```

header.jsp

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib uri="http://www.springframework.org/security/tags" prefix="sec" %>
<html>
<head>
  <%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
      <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-rbsA2VF
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-kenU1KFdBIe4zVF0s(

  <style>
    .bd-placeholder-img {
      font-size: 1.125rem;
      text-anchor: middle;
      -webkit-user-select: none;
      -moz-user-select: none;
      user-select: none;
    }

    @media ( min-width : 768px) {
      .bd-placeholder-img-lg {
        font-size: 3.5rem;
      }
    }

    .b-example-divider {
      height: 3rem;
      background-color: rgba(0, 0, 0, .1);
      border: solid rgba(0, 0, 0, .15);
      border-width: 1px 0;
      box-shadow: inset 0 .5em 1.5em rgba(0, 0, 0, .1), inset 0 .125em .5em
        rgba(0, 0, 0, .15);
    }

    .b-example-vr {
```

```
      flex-shrink: 0;
      width: 1.5rem;
      height: 100vh;
    }

    .bi {
      vertical-align: -.125em;
      fill: currentColor;
    }

    .nav-scroller {
      position: relative;
      z-index: 2;
      height: 2.75rem;
      overflow-y: hidden;
    }

    .nav-scroller .nav {
      display: flex;
      flex-wrap: nowrap;
      padding-bottom: 1rem;
      margin-top: -1px;
      overflow-x: auto;
      text-align: center;
      white-space: nowrap;
      -webkit-overflow-scrolling: touch;
    }
  </style>


</head>
<body class="text-center">
<nav class="navbar navbar-expand navbar-dark bg-dark fixed-top" aria-label="Second navbar example">
    <div class="container-fluid">
      <a class="navbar-brand" href="/">CarShop</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarsExample02" aria-controls="navl
        <span class="navbar-toggler-icon"></span>
      </button>

      <div class="collapse navbar-collapse" id="navbarsExample02">
        <ul class="navbar-nav me-auto">
         <li class="nav-item">
            <a class="nav-link active" aria-current="page" href="/">홈</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/cars">차량보기</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/cart">장바구니</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="/boards/list">게시판</a>
          </li>
                 <li class="nav-item dropdown">
          <button class="btn btn-dark dropdown-toggle" data-bs-toggle="dropdown" aria-expanded="false">
            회원관리
          </button>
          <ul class="dropdown-menu dropdown-menu-dark">
            <li><a class="dropdown-item" href="#">로그인</a></li>
            <li><a class="dropdown-item" href="#">로그아웃</a></li>
          </ul>
        </li>

        </ul>
        <sec:authorize access="isAnonymous()">
                <form action="/cars/login" method="post">
         <input type="submit" class="btn btn-primary" value="login">
            <input type="hidden" name="${_csrf.parameterName}" value="${_csrf.token}"/>
        </form>
        </sec:authorize>

        <sec:authorize access="isAuthenticated()">
                <form action="/logout" method="post">
         <input type="submit" class="btn btn-success" value="logout">
            <input type="hidden" name="${_csrf.parameterName}" value="${_csrf.token}"/>
        </form>
        </sec:authorize>



      </div>
    </div>
  </nav>
```

▼ Tiles in Spring MVC

Apache Tiles

- **Apache에서 제공하는 프레임워크이다.**
- **View(jsp)들을 구조적(상단, 사이드, 메인, 하단 등)으로 설정할 수 있다.**
- **중복 코드를 최소화 할 수 있다.**
- **재사용이 쉽다.**

1. **의존성 주입.**

Home » org.apache.tiles » tiles-servlet » 3.0.8

Tiles Servlet Support » 3.0.8

Tiles servlet support, to enable use of Tiles inside a Servlet environment.

License	Apache 2.0
Tags	servlet apache
Date	Sep 30, 2017
Files	pom (3 KB) jar (24 KB) View All
Repositories	Central Mulesoft
Ranking	#4348 in MvnRepository (See Top Artifacts)
Used By	88 artifacts
Vulnerabilities	**Vulnerabilities from dependencies:** CVE-2020-15250

| Maven | Gradle | Gradle (Short) | Gradle (Kotlin) | SBT | Ivy | Grape | Leiningen | Buildr |

```
<!-- https://mvnrepository.com/artifact/org.apache.tiles/tiles-servlet -->
<dependency>
    <groupId>org.apache.tiles</groupId>
    <artifactId>tiles-servlet</artifactId>
    <version>3.0.8</version>
</dependency>
```

☑ Include comment with link to declaration

Copied to clipboard!

Tiles JSP Support » 3.0.8

Tiles JSP support: Classes and tag libraries to use Tiles in a JSP environment.

License	Apache 2.0
Categories	JSP Tag Libraries
Tags	apache jsp taglib
Date	Sep 30, 2017
Files	pom (5 KB) jar (34 KB) View All
Repositories	Central Spring Lib Release
Ranking	#2571 in MvnRepository (See Top Artifacts) #6 in JSP Tag Libraries
Used By	156 artifacts
Vulnerabilities	Vulnerabilities from dependencies: CVE-2020-15250

Maven | Gradle | Gradle (Short) | Gradle (Kotlin) | SBT | Ivy | Grape | Leiningen | Buildr

```
<!-- https://mvnrepository.com/artifact/org.apache.tiles/tiles-jsp -->
<dependency>
    <groupId>org.apache.tiles</groupId>
    <artifactId>tiles-jsp</artifactId>
    <version>3.0.8</version>
</dependency>
```

☑ Include comment with link to declaration

Tiles Extras » 3.0.8

Extras for Tiles, including non-standard, non-generic, non-identifiable components that may be useful for Tiles users.

License	Apache 2.0
Tags	apache
Date	Sep 30, 2017
Files	pom (4 KB) jar (27 KB) View All
Repositories	Central
Ranking	#18884 in MvnRepository (See Top Artifacts)
Used By	19 artifacts
Vulnerabilities	Vulnerabilities from dependencies: CVE-2020-8908 CVE-2020-15250 CVE-2018-10237

Maven | Gradle | Gradle (Short) | Gradle (Kotlin) | SBT | Ivy | Grape | Leiningen | Buildr

```
<!-- https://mvnrepository.com/artifact/org.apache.tiles/tiles-extras -->
<dependency>
    <groupId>org.apache.tiles</groupId>
    <artifactId>tiles-extras</artifactId>
    <version>3.0.8</version>
</dependency>
```

☑ Include comment with link to declaration

```
<!-- https://mvnrepository.com/artifact/org.apache.tiles/tiles-servlet -->
<dependency>
    <groupId>org.apache.tiles</groupId>
    <artifactId>tiles-servlet</artifactId>
    <version>3.0.8</version>
</dependency>
```

```
    </dependency>

    <!-- https://mvnrepository.com/artifact/org.apache.tiles/tiles-jsp -->
    <dependency>
        <groupId>org.apache.tiles</groupId>
        <artifactId>tiles-jsp</artifactId>
        <version>3.0.8</version>
    </dependency>

    <!-- https://mvnrepository.com/artifact/org.apache.tiles/tiles-extras -->
    <dependency>
        <groupId>org.apache.tiles</groupId>
        <artifactId>tiles-extras</artifactId>
        <version>3.0.8</version>
    </dependency>
```
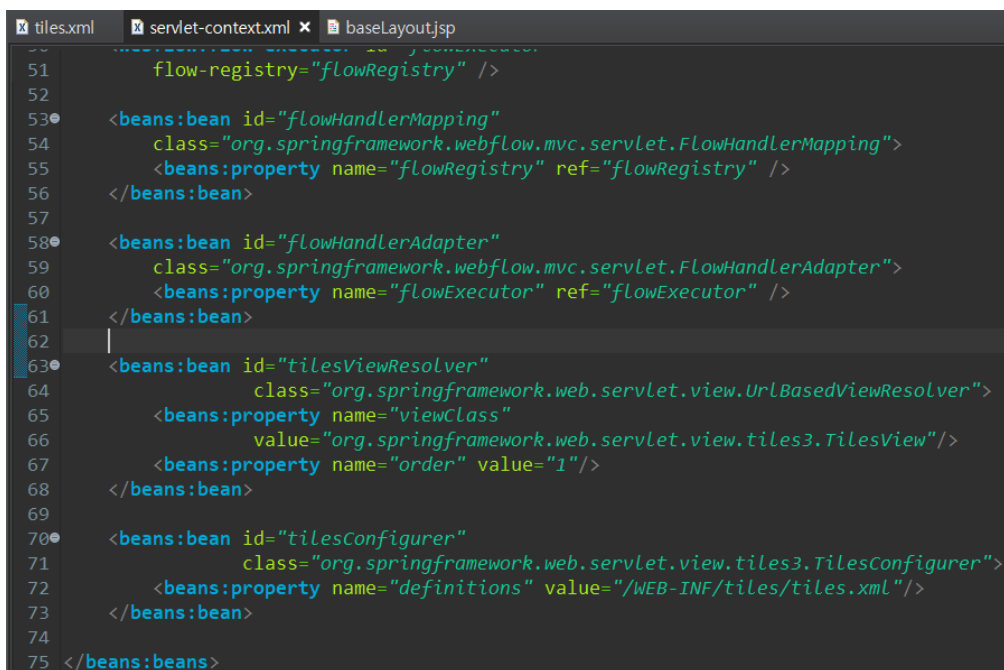
2. **servlet-context.xml 설정.**

```
<beans:bean id="tilesViewResolver"
            class="org.springframework.web.servlet.view.UrlBasedViewResolver">
    <beans:property name="viewClass"
            value="org.springframework.web.servlet.view.tiles3.TilesView"/>
    <beans:property name="order" value="1"/>
</beans:bean>


<beans:bean id="tilesConfigurer"
            class="org.springframework.web.servlet.view.tiles3.TilesConfigurer">
    <beans:property name="definitions" value="/WEB-INF/tiles/tiles.xml"/>
</beans:bean>
```

```
  tiles.xml    x servlet-context.xml  x   baseLayout.jsp
51          flow-registry="flowRegistry" />
52
53●     <beans:bean id="flowHandlerMapping"
54          class="org.springframework.webflow.mvc.servlet.FlowHandlerMapping">
55          <beans:property name="flowRegistry" ref="flowRegistry" />
56      </beans:bean>
57
58●     <beans:bean id="flowHandlerAdapter"
59          class="org.springframework.webflow.mvc.servlet.FlowHandlerAdapter">
60          <beans:property name="flowExecutor" ref="flowExecutor" />
61      </beans:bean>
62
63●     <beans:bean id="tilesViewResolver"
64                  class="org.springframework.web.servlet.view.UrlBasedViewResolver">
65          <beans:property name="viewClass"
66                  value="org.springframework.web.servlet.view.tiles3.TilesView"/>
67          <beans:property name="order" value="1"/>
68      </beans:bean>
69
70●     <beans:bean id="tilesConfigurer"
71                  class="org.springframework.web.servlet.view.tiles3.TilesConfigurer">
72          <beans:property name="definitions" value="/WEB-INF/tiles/tiles.xml"/>
73      </beans:bean>
74
75  </beans:beans>
```
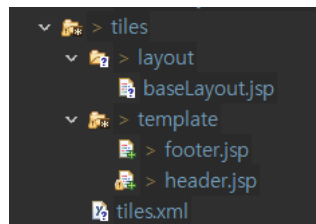
3. **폴더 & 파일 설정.**

폴더 설정.

baseLayout.jsp

```jsp
<%@ page contentType="text/html; charset=utf-8" %>
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<%@ taglib prefix="tiles" uri="http://tiles.apache.org/tags-tiles"%>

<html >
<head>

<!-- <link -->
<!--  href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-alpha1/dist/css/bootstrap.min.css" -->
<!--  rel="stylesheet" -->
<!--  integrity="sha384-GLhlTQ8iRABdZLl6O3oVMWSktQOp6b7In1Zl3/Jr59b6EGGoI1aFkw7cmDA6j6gD" -->
<!--  crossorigin="anonymous"> -->


<title><tiles:insertAttribute name="title" /></title>
</head>
<body>
<tiles:insertAttribute name="menu" />

<div class="my-5">
  <div class="alert alert-dark">
    <div class="container">
        <h1 class="display-3"><tiles:insertAttribute name="heading" /> </h1>
        <p><tiles:insertAttribute name="subheading" /></p>
    </div>
  </div>
</div>

    <div class="row" >
        <tiles:insertAttribute name="content" />
    </div>
    <div class="footer">
        <tiles:insertAttribute name="footer" />
    </div>
</body>
</html>
```

tiles.xml

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE tiles-definitions PUBLIC "-//Apache Software Foundation//DTD  Tiles Configuration 3.0//EN"
"http://tiles.apache.org/dtds/tiles-config_3_0.dtd">

<tiles-definitions>

<definition name="base-Template" template="/WEB-INF/tiles/layout/baseLayout.jsp">

  <put-attribute name="title" value="test title"/>
  <put-attribute name="heading" value=""/>
  <put-attribute name="subheading" value=""/>
  <put-attribute name="menu" value="/WEB-INF/tiles/template/header.jsp"/>
  <put-attribute name="content" value=""/>
  <put-attribute name="footer" value="/WEB-INF/tiles/template/footer.jsp"/>

</definition>


<definition name="main" extends="base-Template">

  <put-attribute name="title" value="CarShop"/>
  <put-attribute name="heading" value="방문하신 모든 분들을 환영합니다."/>
  <put-attribute name="subheading" value="Welcome to Carshop"/>

</definition>
```

```xml
<definition name="login" extends="base-Template">

  <put-attribute name="title" value="로그인"/>
  <put-attribute name="content" value="/WEB-INF/views/login.jsp"/>

</definition>

<definition name="home" extends="base-Template">

  <put-attribute name="title" value="홈"/>
  <put-attribute name="content" value="/WEB-INF/views/home.jsp"/>

</definition>

<definition name="errorCommon" extends="base-Template">

  <put-attribute name="title" value="에러메시지"/>
  <put-attribute name="content" value="/WEB-INF/views/errorCommon.jsp"/>

</definition>

<definition name="error" extends="base-Template">

  <put-attribute name="title" value="에러메시지"/>
  <put-attribute name="content" value="/WEB-INF/views/error.jsp"/>

</definition>

<definition name="cart" extends="base-Template">

  <put-attribute name="title" value="장바구니"/>
  <put-attribute name="content" value="/WEB-INF/views/cart.jsp"/>

</definition>

<definition name="cars" extends="base-Template">

  <put-attribute name="title" value="상품목록"/>
  <put-attribute name="content" value="/WEB-INF/views/cars.jsp"/>

</definition>

<definition name="car" extends="base-Template">

  <put-attribute name="title" value="상품상세"/>
  <put-attribute name="content" value="/WEB-INF/views/car.jsp"/>

</definition>

<definition name="board" extends="base-Template">

  <put-attribute name="title" value="게시판"/>
  <put-attribute name="content" value="/WEB-INF/views/board.jsp"/>

</definition>

<definition name="addCar" extends="base-Template">

  <put-attribute name="title" value="상품등록"/>
  <put-attribute name="content" value="/WEB-INF/views/addCar.jsp"/>

</definition>

</tiles-definitions>
```