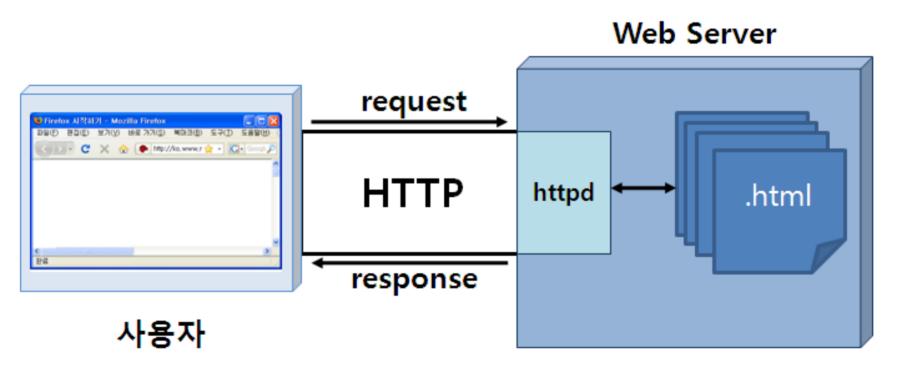
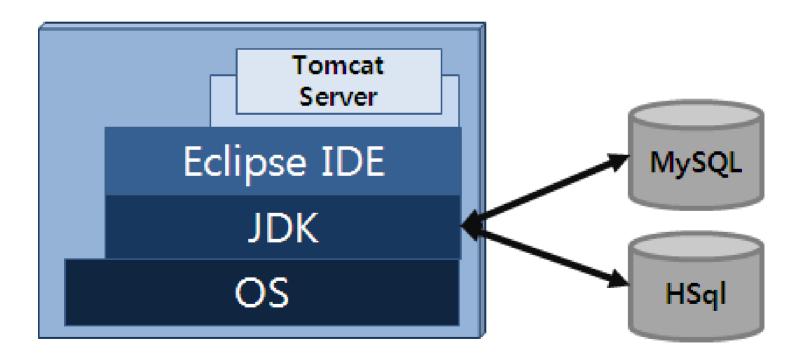
Java Server Programming

전 혜 영 OOPSW.jeonhye0@gmail.com

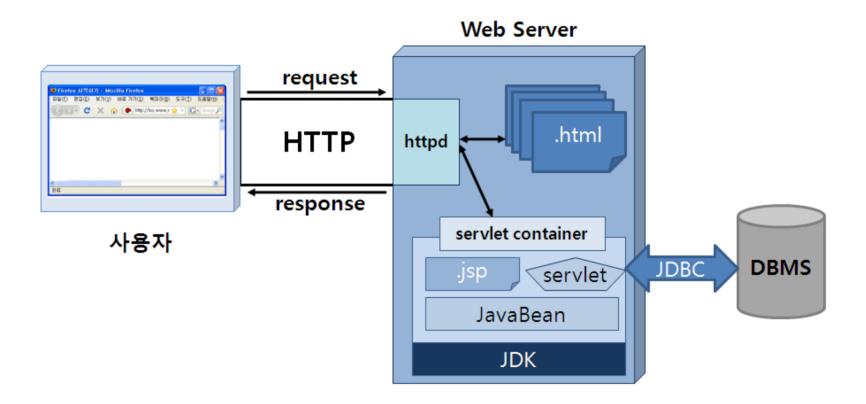
웹 개발 환경



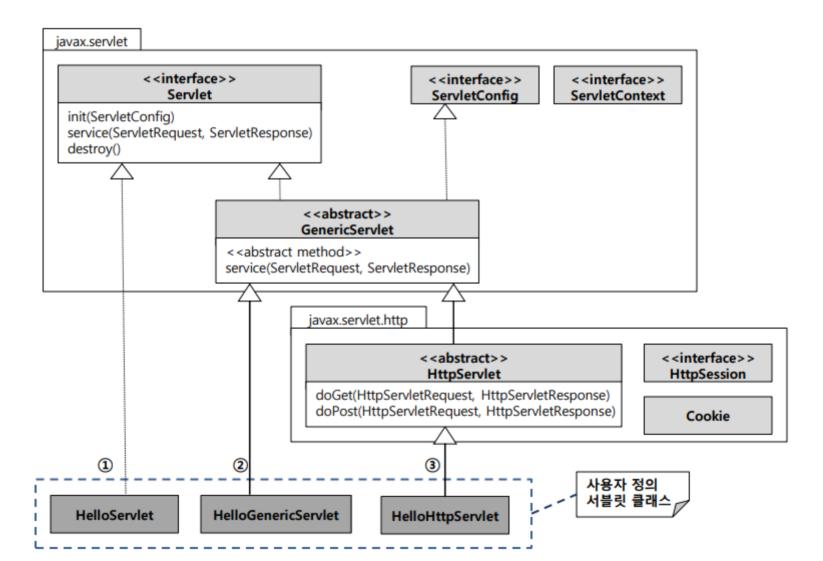
Java Web Server 개발 환경



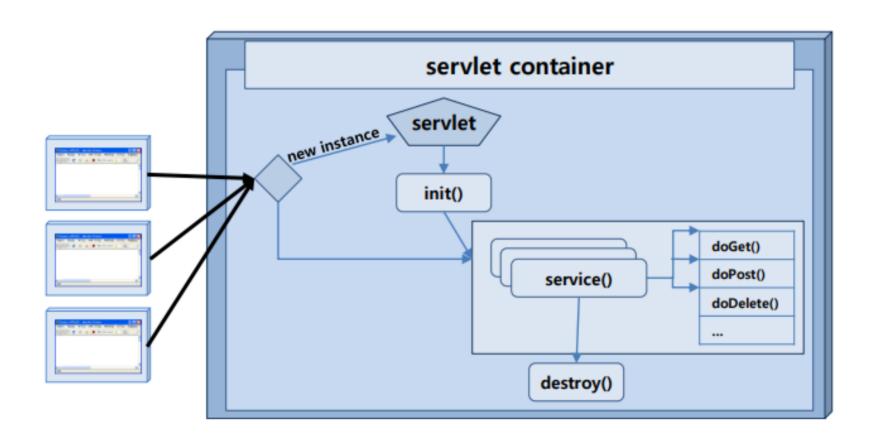
Java Web Server 개발 환경



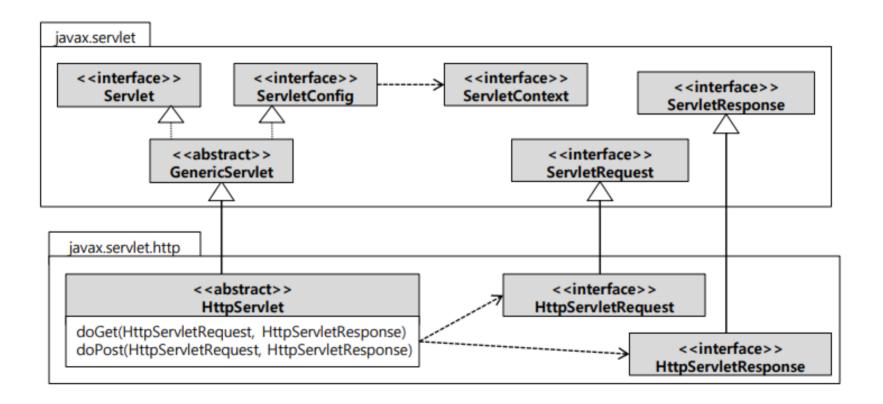
Servlet API



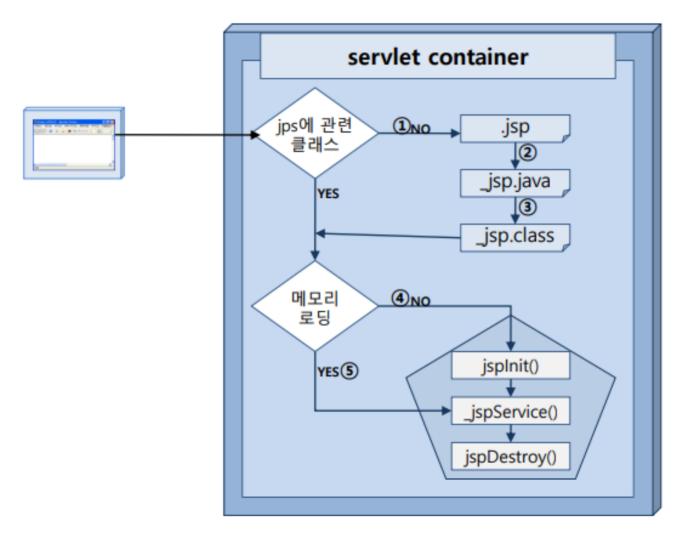
Servlet Life Cycle



Servlet 관련 API



JSP Life Cycle



EL

- \${param.name}
 - request.getParameter("name");
- \${member}
 - request.getAttribute("member")
- 연산자
 - 산술연산자: + * / (div) % (mod)
 - 논리연산자 : &&(and) ||(or) !(not)
 - 관계연산자 : ==(eq) !=(ne) <(lt) >(gt) <=(le) >=(ge)
 - 삼항연산자 : ?:
 - \${colors == null ? "transparent" : colors}
 - 그 외 예약어: true, false, null, instanceof,
 empty(null이거나 공백일때)

JSTL Tag Libraries

Functional Area	URI	Prefix
core	http://java.sun.com/jsp/jstl/core	С
XML processing	http://java.sun.com/jsp/jstl/xml	x
I18N capable formatting	http://java.sun.com/jsp/jstl/fmt	fmt
relational db access (SQL)	http://java.sun.com/jsp/jstl/sql	sql
Functions	http://java.sun.com/jsp/jstl/functions	fn

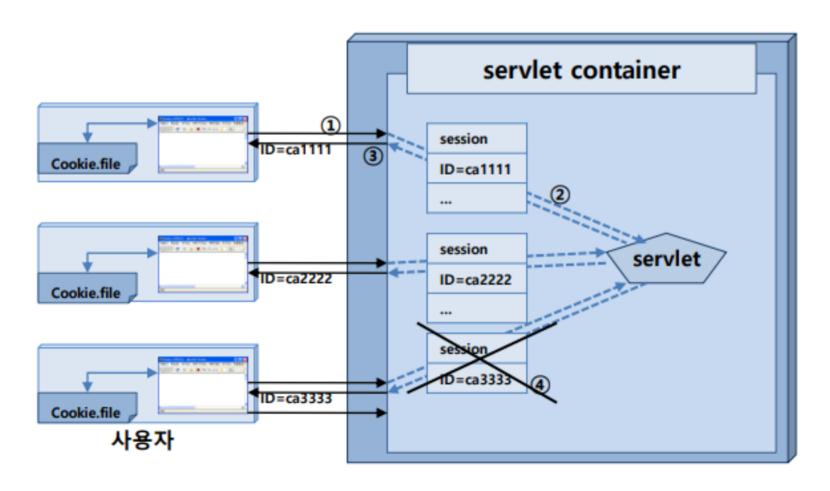
```
<%@ taglib prefix="c"
uri="http://java.sun.com/jsp/jstl/core" %>
<c:out value="${member.name}" default="jjeon" />
<c:remove var="no" scope="page" />
<c:if test="${member.age < 20}" var="result"
scope="page">
 당신은 미성년자입니다
</c:if>
<c:if test="${!empty list}" > content </c:if>
```

```
<c:choose>
<c:when test="${vo.type==1}">
<img src="<%=cp%>/images/type1.jpg"/>
</c:when>
<c:when test="${vo.type==2}">
<img src="<%=cp%>/images/type2.jpg" />
</c:when>
<c:when test="${vo.type==0 or vo.type==3}">
<img src="<%=cp%>/images/type_ment.jpg" />
</c:when>
<c:otherwise>
<img src="<%=cp%>/images/type_heart.jpg" />
</c:otherwise>
</c:choose>
```

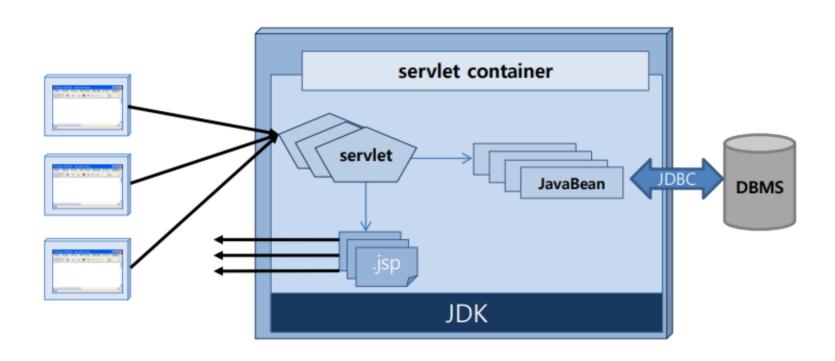
```
<c:forEach items="${list}" var="notice" varStatus="status">
${status.count}
 ${notice.title}
</c:forEach>
<c:forEach var="x" begin="0" end="10" step="2">
${x},
${x*x}
</c:forEach>
```

HttpSession

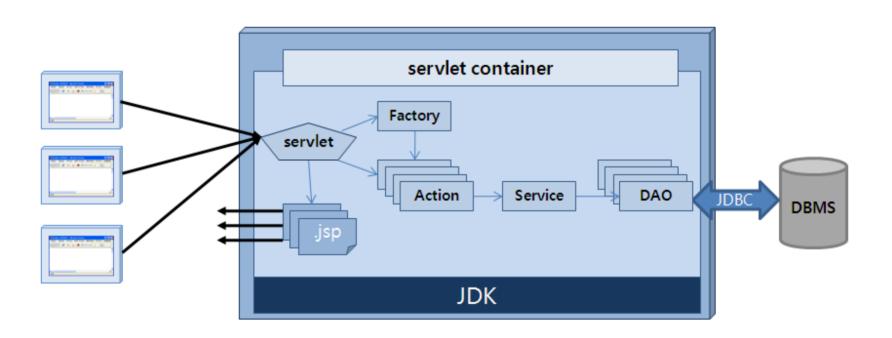
scope – page, request, session, application



MVC Model2 개발 환경



디자인 패턴 적용 개발 환경



디자인 패턴 적용 개발 환경

Servlet Container web.xml <<interface>> Action ActionFactory <<servlet>> request FrontController request DataSource Manager MemberInsertAction ActionForward Member MemberLoginAction Manager MemberDAO Query response XXXException Presentation **Business** Integration

SpringMVC 적용 개발 환경

Servlet Container

