

Maven



Maven

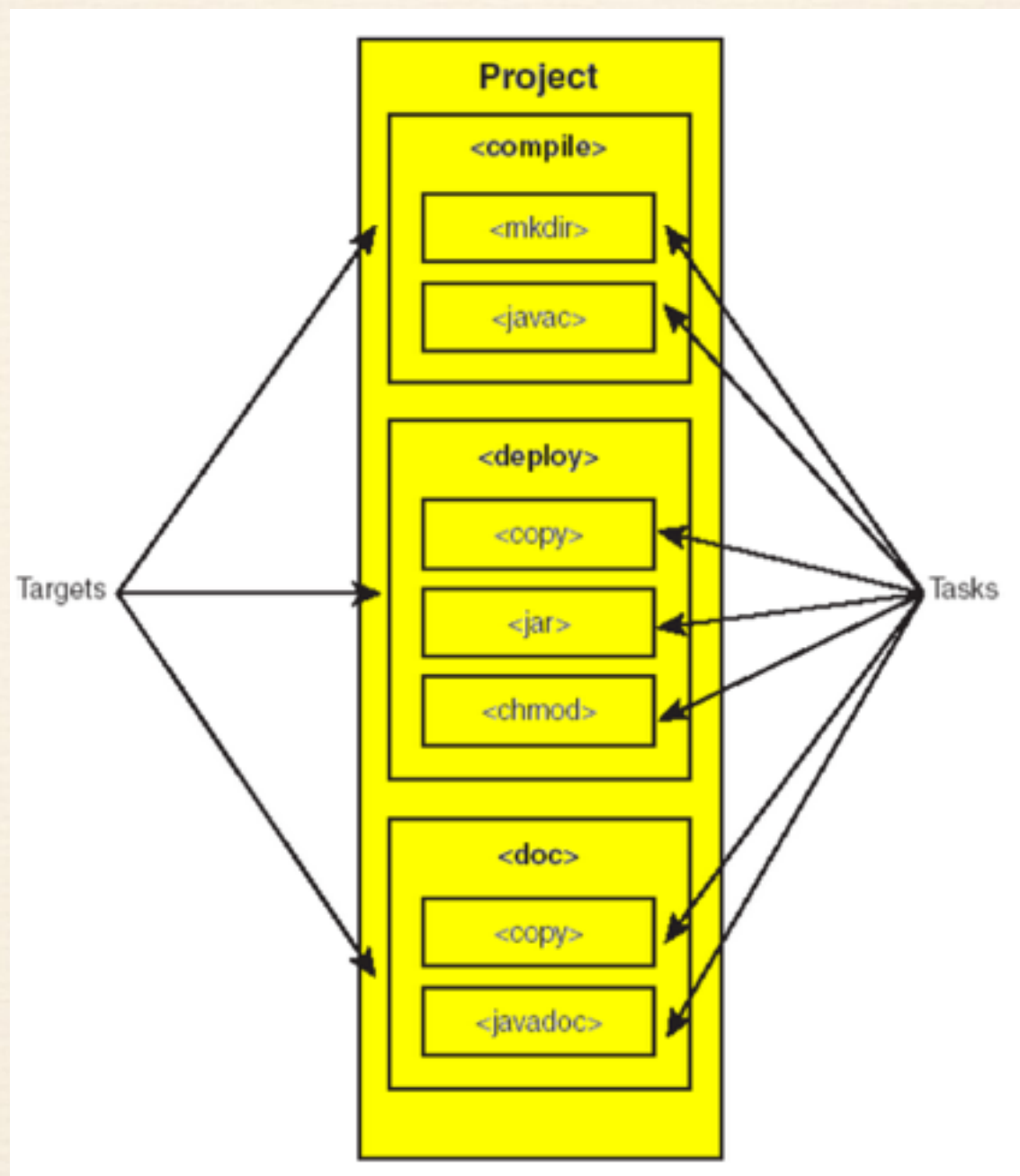
- ❖ Making the build process easy
- ❖ Providing a uniform build system
- ❖ Providing quality project information
- ❖ Providing guidelines for best practices development

Build

- ❖ clean
- ❖ javac
- ❖ test (java org.junit.runner.JUnitCore [test class name])
- ❖ packaging (jar, war, ear)
- ❖ deploy

Ant

<http://ant.apache.org/manual/index.html>



Maven

- ❖ eclipse 에서 maven project 생성
- ❖ dependencies 정의
- ❖ build 정의

Maven

- ❖ mvn [options] [<goal(s)>] [<phase(s)>]
- ❖ <http://maven.apache.org/guides/getting-started/maven-in-five-minutes.html>
- ❖ <http://maven.apache.org/guides/introduction/introduction-to-the-lifecycle.html>

Maven

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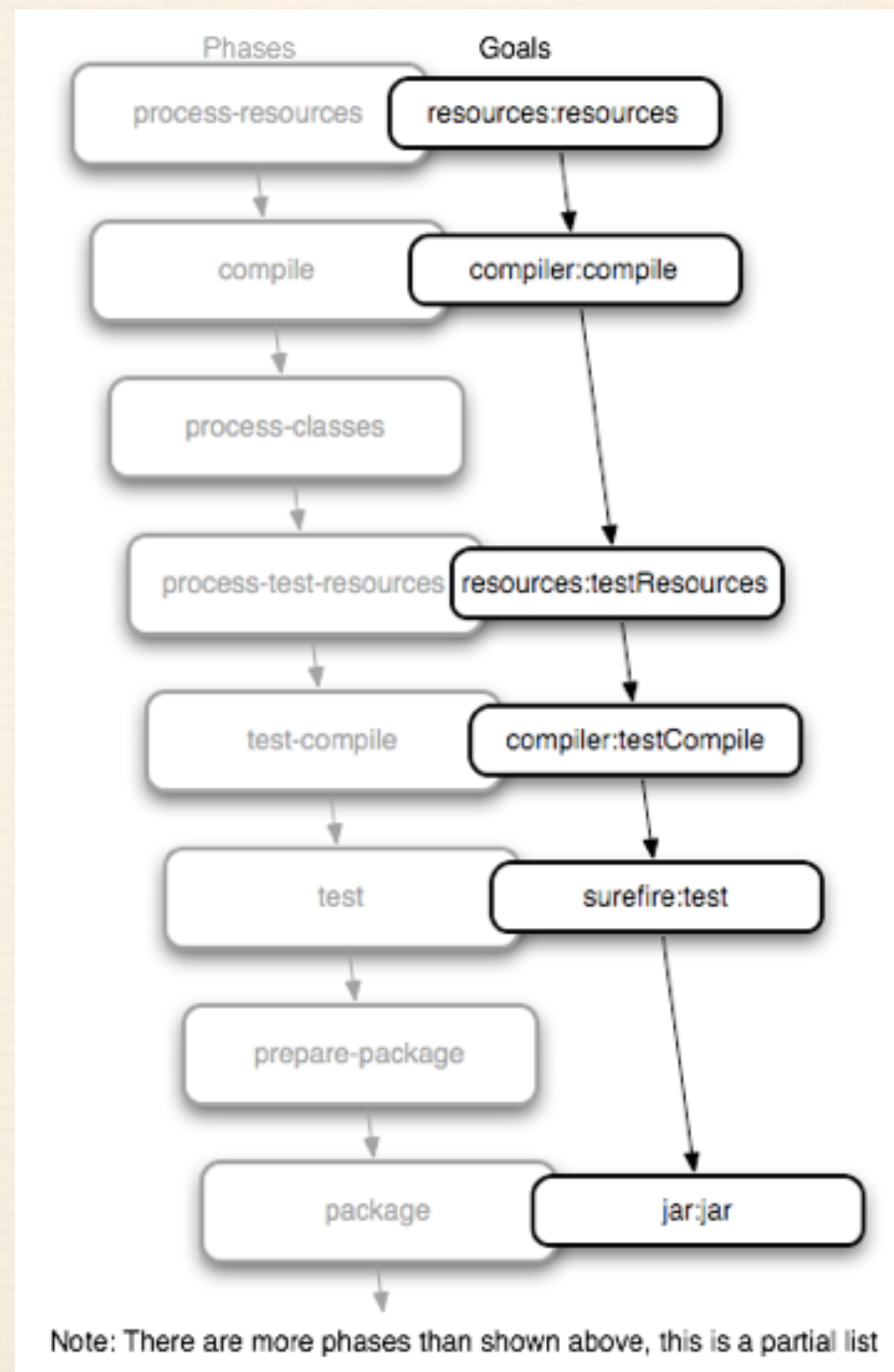
| Clean Lifecycle |
|-----------------|
| pre-clean       |
| <b>clean</b>    |
| post-clean      |

| Default Lifecycle       |                       |
|-------------------------|-----------------------|
| validate                | test-compile          |
| initialize              | process-test-classes  |
| generate-sources        | test                  |
| process-sources         | prepare-package       |
| generate-resources      | <b>package</b>        |
| process-resources       | pre-integration-test  |
| <b>compile</b>          | integration-test      |
| process-classes         | post-integration-test |
| generate-test-sources   | verify                |
| process-test-sources    | <b>install</b>        |
| generate-test-resources | <b>deploy</b>         |
| process-test-resources  |                       |

| Site Lifecycle |
|----------------|
| pre-site       |
| <b>site</b>    |
| post-site      |
| site-deploy    |



# Maven





# Maven

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- ❖ <dependency>

- ❖ scope

- ❖ compile

- ❖ provided

- ❖ runtime

- ❖ test

- ❖ system



# Maven

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- ❖ <repository>
- ❖ <pluginRepository>
- ❖ <distributionManagement>



# Maven

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- ❖ `<profile>`
- ❖ `<build>`
- ❖ `<plugin>`
- ❖ `<resource>`
- ❖ `<pluginManagement>`



# Maven

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❖ settings.xml



# Revision Control

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- ❖ SVN (subversion)
- ❖ Git
- ❖ CVS
- ❖ VSS (Visual SourceSafe)



# Java Web Application



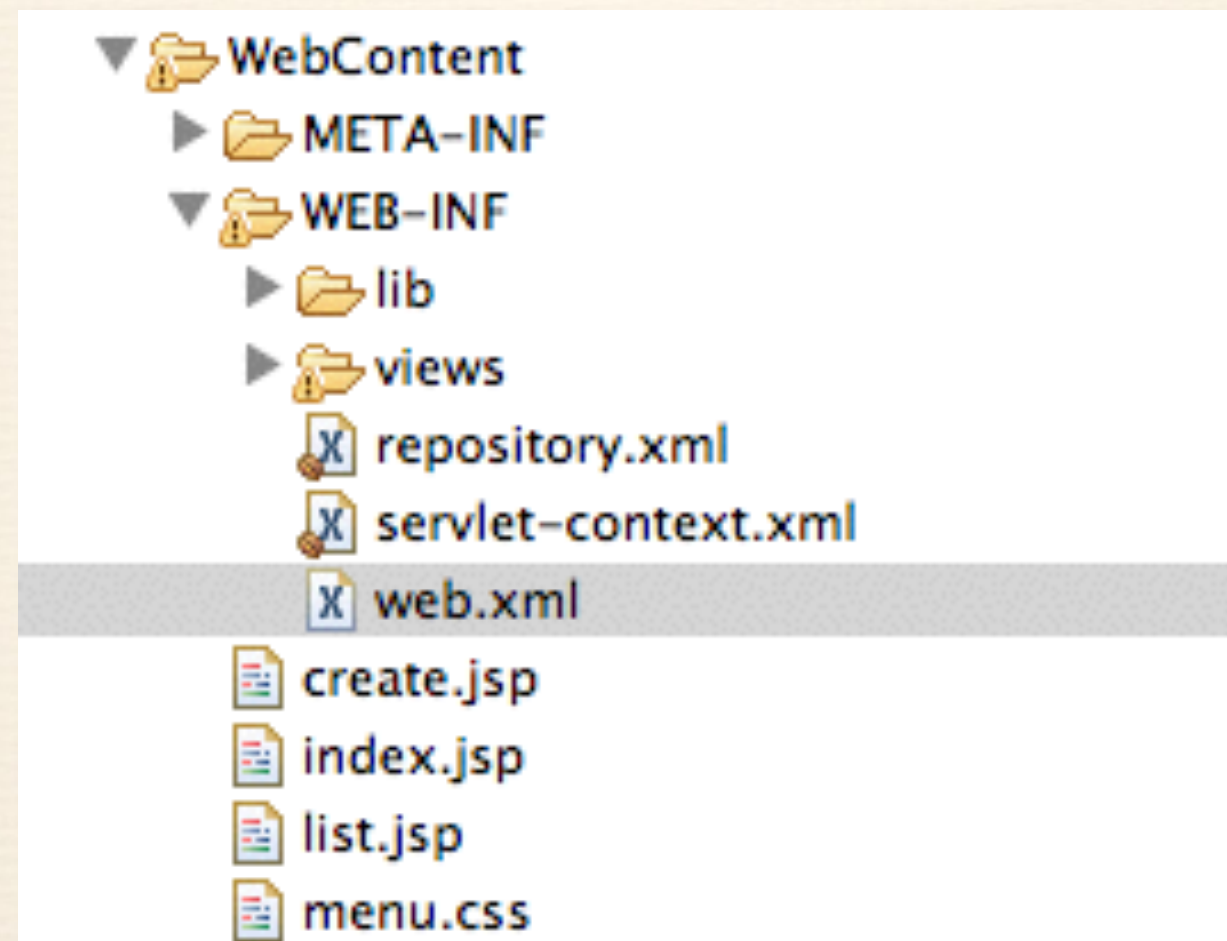


# Java Web Application

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❖ War

❖ 구조





# Java Web Application

## ❖ web.xml

```
- <xsd:group name="web-commonType">
  - <xsd:choice>
    <xsd:group ref="javaee:descriptionGroup"/>
    <xsd:element name="distributable" type="javaee:emptyType"/>
    + <xsd:element name="context-param" type="javaee:param-valueType"></xsd:element>
    <xsd:element name="filter" type="javaee:filterType"/>
    <xsd:element name="filter-mapping" type="javaee:filter-mappingType"/>
    <xsd:element name="listener" type="javaee:listenerType"/>
    <xsd:element name="servlet" type="javaee:servletType"/>
    <xsd:element name="servlet-mapping" type="javaee:servlet-mappingType"/>
    <xsd:element name="session-config" type="javaee:session-configType"/>
    <xsd:element name="mime-mapping" type="javaee:mime-mappingType"/>
    <xsd:element name="welcome-file-list" type="javaee:welcome-file-listType"/>
    <xsd:element name="error-page" type="javaee:error-pageType"/>
    <xsd:element name="jsp-config" type="javaee:jsp-configType"/>
    <xsd:element name="security-constraint" type="javaee:security-constraintType"/>
    <xsd:element name="login-config" type="javaee:login-configType"/>
    <xsd:element name="security-role" type="javaee:security-roleType"/>
    <xsd:group ref="javaee:jndiEnvironmentRefsGroup"/>
    <xsd:element name="message-destination" type="javaee:message-destinationType"/>
    <xsd:element name="locale-encoding-mapping-list" type="javaee:locale-encoding-mapping-listType"/>
  </xsd:choice>
</xsd:group>
```



# Servlet

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- ❖ `public void init(ServletConfig config)  
throws ServletException;`
- ❖ `public void service(ServletRequest req, ServletResponse  
res) throws ServletException, IOException;`
- ❖ `public void destroy();`

# Filter

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- ❖ `public void init(FilterConfig filterConfig) throws ServletException;`
- ❖ `public void doFilter ( ServletRequest request, ServletResponse response, FilterChain chain ) throws IOException, ServletException;`
- ❖ `public void destroy();`



# Listener

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- ❖ `javax.servlet.ServletContextListener` : 컨텍스트 초기화, 컨텍스트 마무리
- ❖ `javax.servlet.ServletContextAttributeListener` : 컨텍스트에 속성을 추가, 제거, 수정했는지 알고 싶을 때
- ❖ `javax.servlet.http.HttpSessionListener` : 얼마나 많은 동시 사용자가 물려 있는지
- ❖ `javax.servlet.ServletRequestListener` : 요청이 들어올때마다 알고 싶을때 로그를 남기고 싶어서 그럴때
- ❖ `javax.servlet.ServletRequestAttributeListener` : Request속성이 추가, 제거, 수정 되었는지 알고 싶을때.
- ❖ `javax.servlet.http.HttpSessionBindingListener` : 속성 객체가 하나 있는데 이 객체가 세션에 바인딩 되었는지 아니면 제거 되었는지 알고싶을때.
- ❖ `javax.servlet.http.HttpSessionAttributeListener` : 세션 속성이 추가, 제거, 수정 되었는지 알고 싶을때.
- ❖ `javax.servlet.http.HttpSessionActivationListener` : 속성 객체가 하나 있는데, 세션에 바인딩한 이 타입의 객체가 다른 JVM으로 옮겨 갔는지, 또는 왔는지 알고 싶을때.

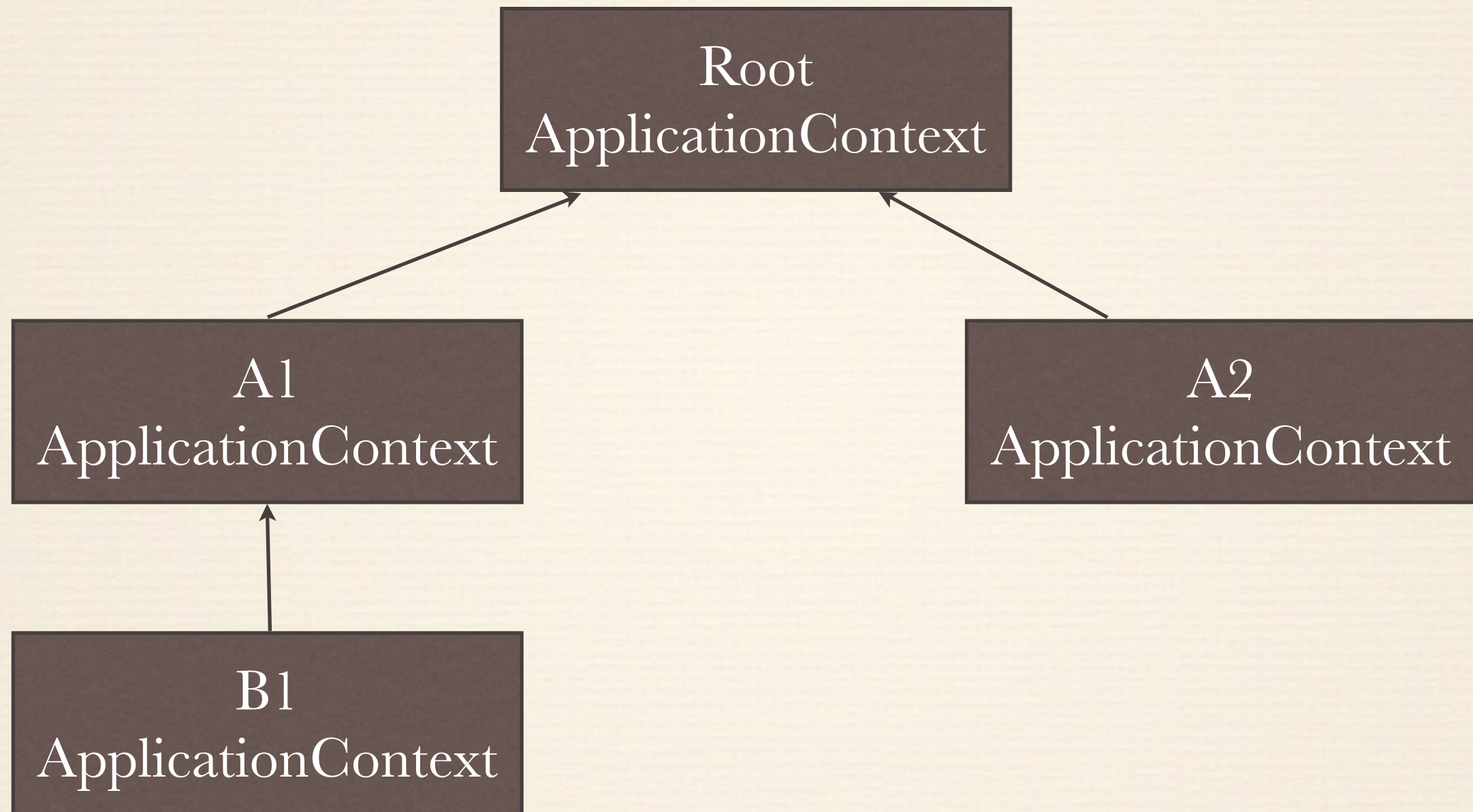
ApplicationContext



ApplicationContext

- ❖ extends BeanFactory
- ❖ StaticApplicationContext
- ❖ GenericXmlApplicationContext
- ❖ AnnotationConfigApplicationContext
- ❖ 각각의 WebApplicationContext
 - ❖ StaticWebApplicationContext
 - ❖ XmlWebApplicationContext
 - ❖ AnnotationConfigWebApplicationContext

ApplicationContext 계층구조



Bean 등록

- ❖ `<bean> ... </bean>`
- ❖ `@Configuration ... @Bean ... @Bean`
- ❖ `@Component @Controller @Service @Repository`

DI 설정

- ❖ `<property> ... </property>`
- ❖ `<constructor-arg> ... </constructor-arg>`
- ❖ `@Resource(name="jdbcTemplate")`
- ❖ `@Autowired`

Value 설정

- ❖ `<property name="name" value="value" />`
- ❖ `@Value`
 - ❖ `@Value("value") String str;`
 - ❖ `@Value("1.2") double rate;`
 - ❖ `@Value("1,2,3,4") int[] intarr;`

Value 설정

- ❖ <property name="names">
 - ❖ <list>
 - ❖ <value> a </value>
 - ❖ <value> b </value>
 - ❖ </list>
- ❖ </property>
- ❖ <property name="ages">
 - ❖ <map>
 - ❖ <entry key="Kim" value="30" />
 - ❖ <entry key="Lee" value="35" />
 - ❖ </map>
- ❖ </property>

Value 설정

- ❖ <property name="settings">
 - ❖ <props>
 - ❖ <prop key="username">jeju</prop>
 - ❖ <prop key="password">jejupw</prop>
 - ❖ </props>
- ❖ </property>
- ❖ <property name="beans">
 - ❖ <list>
 - ❖ <ref bean="beanA" />
 - ❖ <ref bean="beanB" />
 - ❖ </list>
- ❖ </property>

Bean Scope

- ❖ singleton (Default)
- ❖ prototype
- ❖ request
- ❖ session
- ❖ globalSession
- ❖ application