



Spring Breakout Session Web Applications

by Vlad Costel Ungureanu
for FII UAIC, Learn Stuff and Endava
Pass It On



Spring Breakout Session

Web Applications

- HTTP
- HTTP Verbs
- Status Codes
- Servlets
- JSP
- JSP Scripts
- 2 Tier Architecture
- Web Apps Structure
- 3 Tier Architecture
- Maven
- Git
- Overview



- Stateless protocol
- Communication is made through TCP/IP
- Standard port for TCP/IP is 80
- Communication is request / response based
- Requests are made to Uniform Resource Locators (URLs)

GET

Returns a resource based on the URL provided information

POST

Creates a resources using the information from the request payload

PUT

Modifies an existing resource based on the information from the request payload

DELETE

Deletes a resources based on the URL provided information

- Server always responds with HTTP status code and payload
- Status codes indicate the way the client should interpret the message
- Status codes conventions:
 - 1xx: Informational Messages
 - 2xx: Successful
 - 3xx: Redirection
 - 4xx: Client Error
 - 5xx: Server Error

- Java class that processes requests and produces responses
- Implements an interface
- It's lifecycle is defined by the following methods: `init()`, `service()` and `destroy()`.
- Servlets run on Application Servers
- Each request to a servlet is managed in a new thread

- Facilitates the generation of HTML code
- All JSP pages are translated (compiled) into a servlet and then executed
- Any dynamic part of a JSP page is actually Java code
- It's the basis for Presentation Layer

❑ Java Scriptlets:

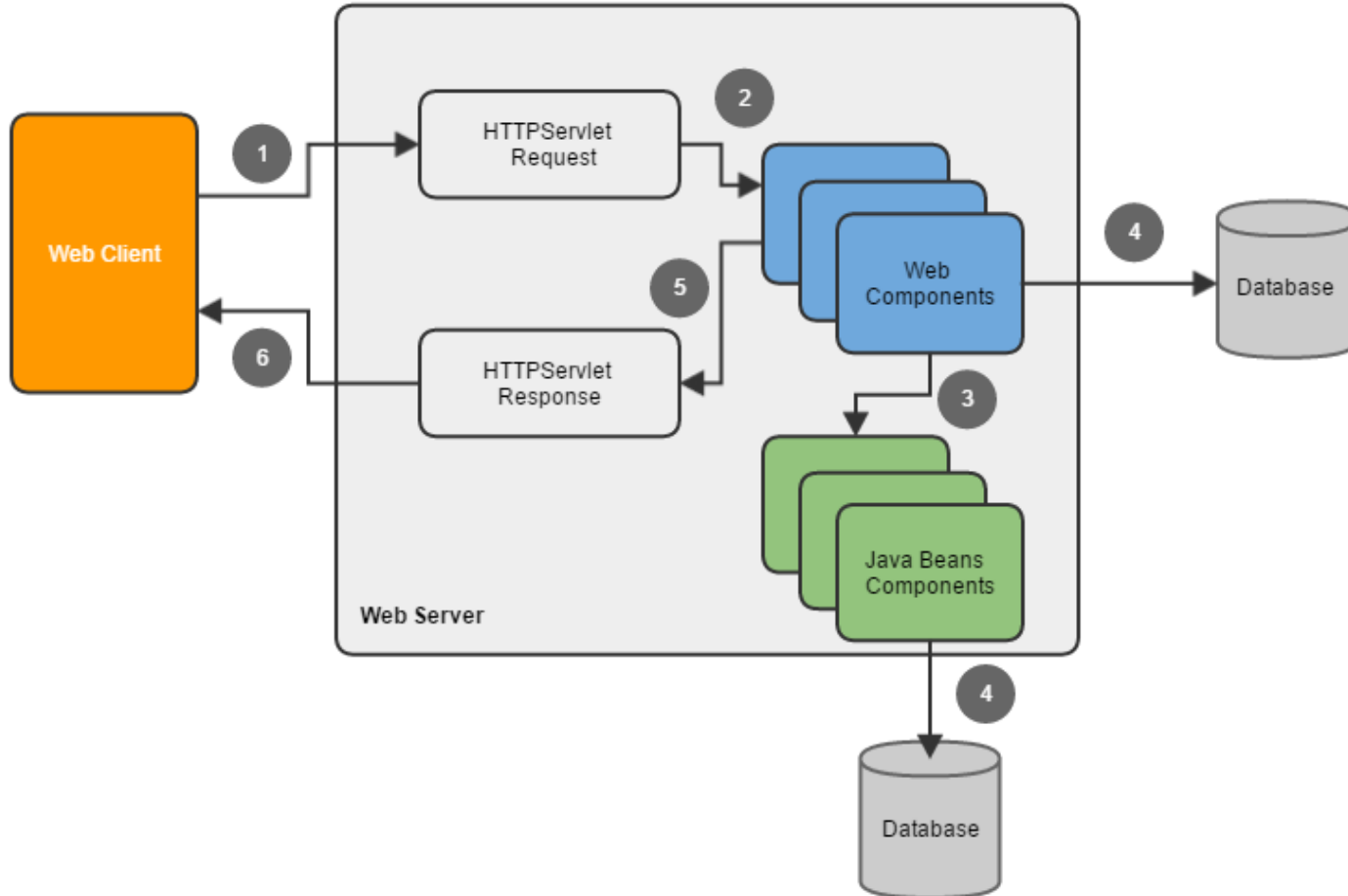
```
<%! Calendar c = Calendar.getInstance(); %>  
<%//Java codes  
    String userName=null;  
    userName=request.getParameter("userName");  
%>
```

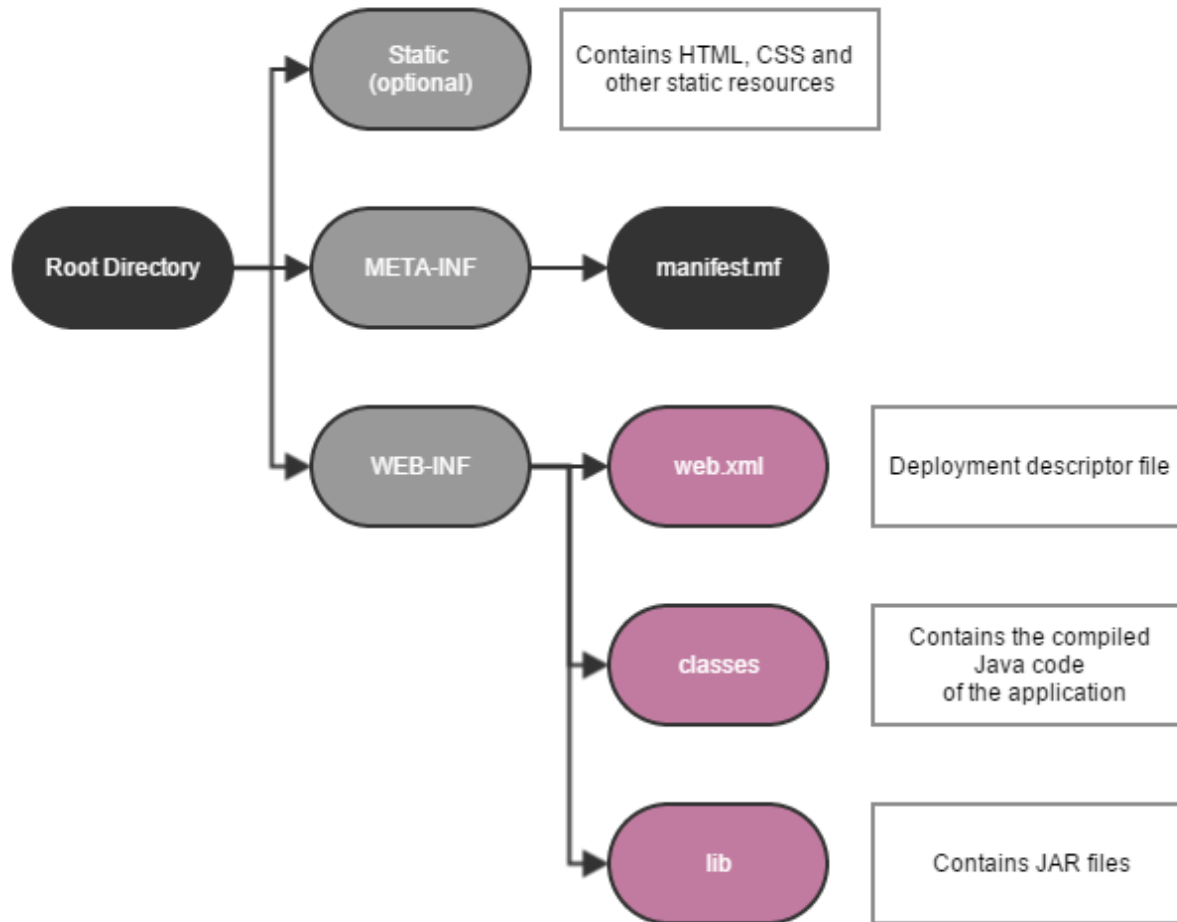
❑ JSP elements:

```
<jsp:useBean id="object_name" class="class_name"/>  
<jsp:include page="scripts/login.jsp" />
```

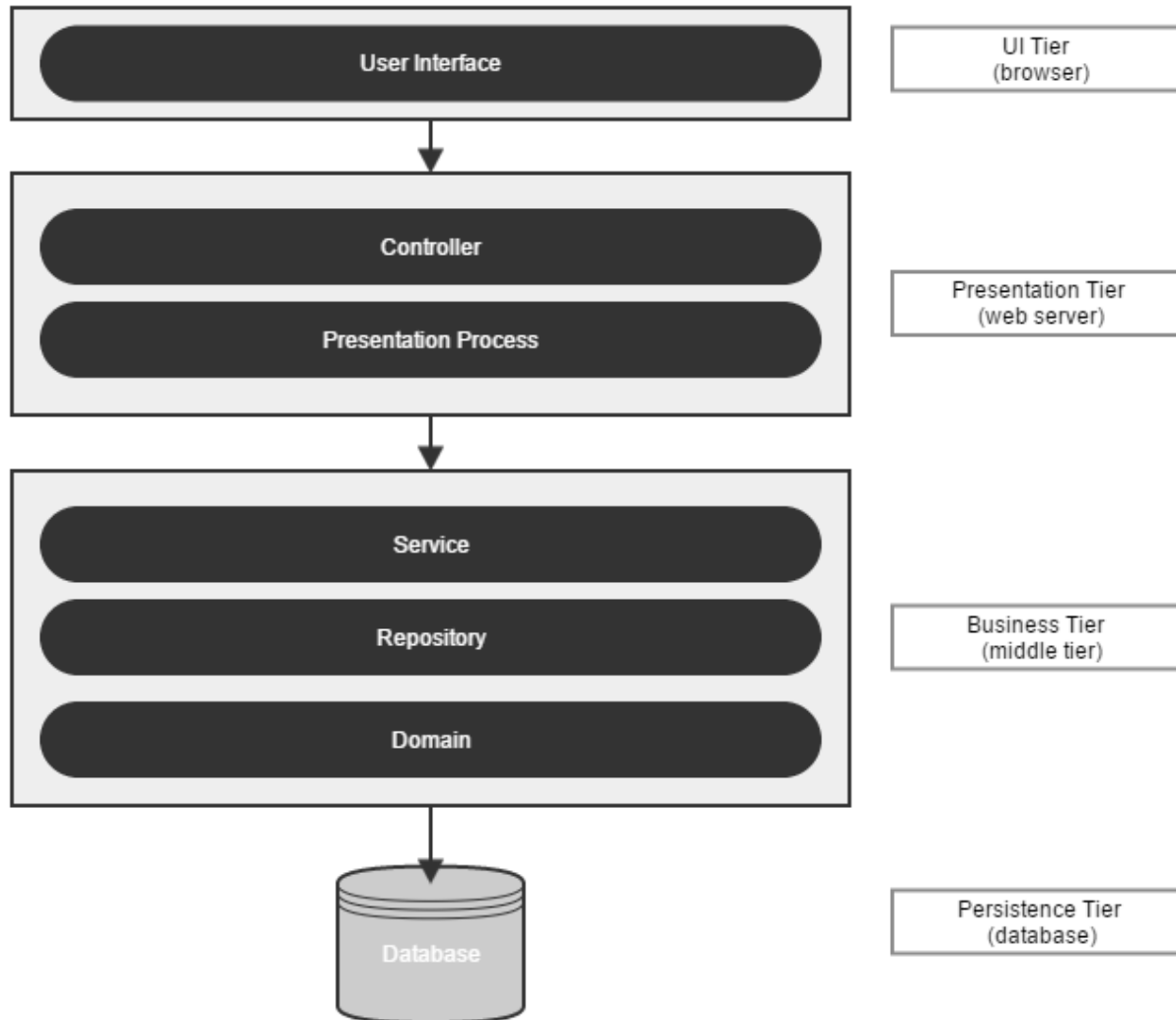
❑ JSP directives:

```
<%@ page import=java.util.Date%>  
<%@ include file=myJSP%>
```





- SpringClass1
 - JAX-WS Web Services
 - Deployment Descriptor: SpringClass1
 - Spring Elements
 - Java Resources
 - src/main/java
 - src/main/resources
 - spring
 - logback.xml
 - src/test/java
 - src/test/resources
 - Libraries
 - JavaScript Resources
 - Deployed Resources
 - src
 - main
 - java
 - resources
 - spring
 - application-config.xml
 - logback.xml
 - webapp
 - WEB-INF
 - view
 - showMessage.jsp
 - mvc-config.xml
 - web.xml
 - index.jsp
 - test
 - java
 - resources
 - target
 - pom.xml



```
<dependencies>
  <!-- Spring MVC -->
  <dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-webmvc</artifactId>
    <version>${spring-framework.version}</version>
  </dependency>
</dependencies>
```

mvn package

mvn clean install

mvn eclipse:eclipse

mvn clean install -DskipTests

```
git clone https://github.com/UngureanuVlad/jee-labs-starter.git
```

```
git add -A
```

```
git commit -m 'Description of commit'
```

```
git push origin master
```

```
git init
```

```
git remote add origin https://github.com/UngureanuVlad/jee-labs-starter.git
```

```
git push origin master
```

```
git pull origin master
```


THANK YOU!

Vlad Costel Ungureanu
ungureanu_vlad_costel@yahoo.com

This is a free course from [LearnStuff.io](https://learnstuff.io)
– not for commercial use –