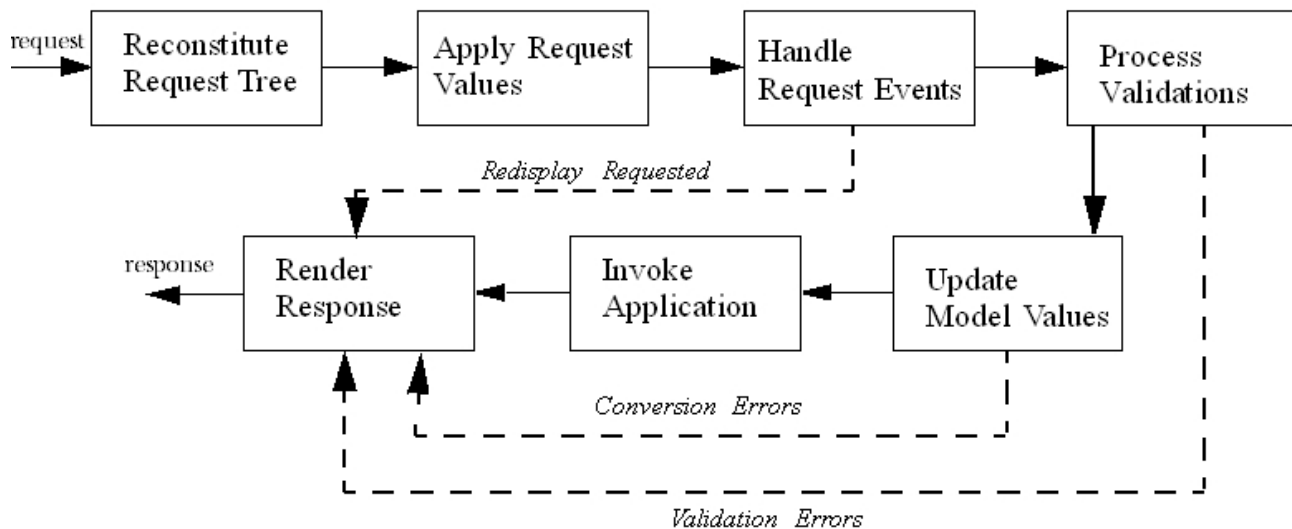


## JENI 3 – 09 Modul Praktikum JSF

### 1. Tujuan

- Mempersiapkan aplikasi JSF menggunakan Netbeans
- Membuat aplikasi Guest Book sederhana

### 2. Latar Belakang



**JSF LifeCycle**

## JENI 3 – 09 Modul Praktikum JSF

### 3. Percobaan

#### Percobaan 1 : Menyiapkan aplikasi project JSF



Info

Tujuan section ini adalah membuat project JSF.

##### **Download JSF Framework**

JSF Framework bisa didownload di <http://java.sun.com/jsf>. Dalam distribusi JSF terdiri dari JSF library dalam bentuk jar (jsf-impl.jar, jsf-api.jar), dokumentasi dan javadocs, dan beberapa contoh aplikasi.

Sebagai alternatif anda bisa menggunakan MyFaces (<http://myfaces.apache.org>), project open source implementasi JSF pertama.

##### **Membuat project dengan Netbeans IDE**

##### **Langah-langkahnya:**

1. Buat project web baru dengan nama **jeni\_jsf**



Tip

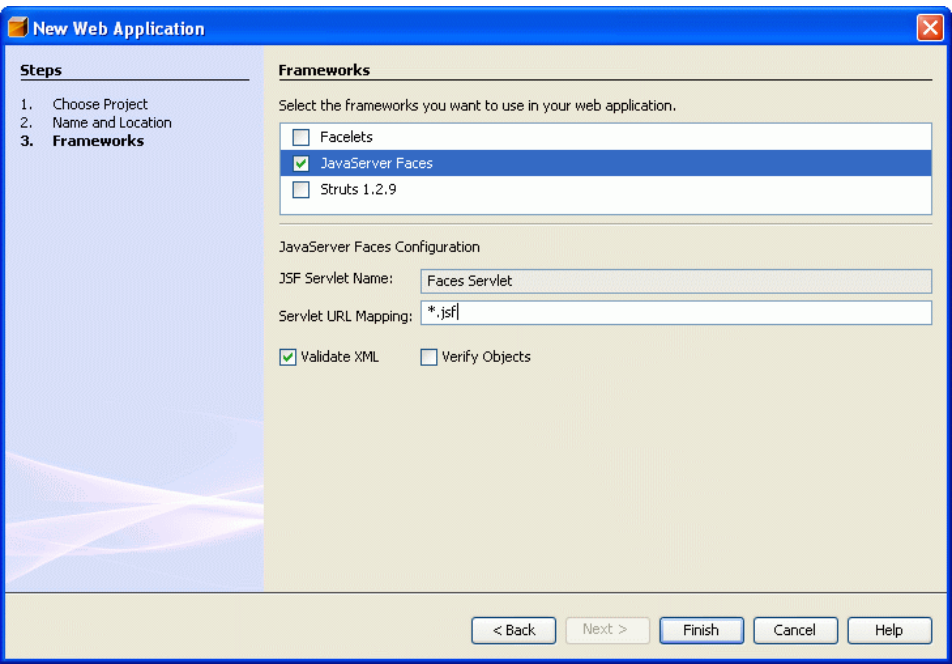
File → New Project, pilih category Web → Web Application, klik Next  
Ketikkan nama project, klik Next  
Pilih Framework Java Server Faces, lakukan konfigurasi secukupnya.  
Klik Finish



Tip

Konfigurasi pada Java Server Faces:  
Dengan Netbeans IDE:

## JENI 3 – 09 Modul Praktikum JSF



**Steps**

1. Choose Project
2. Name and Location
3. **Frameworks**

**Frameworks**

Select the frameworks you want to use in your web application.

- ☐ Facelets
- ☒ JavaServer Faces
- ☐ Struts 1.2.9

**JavaServer Faces Configuration**

JSF Servlet Name:

Servlet URL Mapping:

☒ Validate XML ☐ Verify Objects

< Back Next > Finish Cancel Help

Servlet URL Mapping = URL servlet yang tangani oleh Faces Servlet

### Secara Manual:

- Menambahkan librari jsf dan dependencinya (jsf-impl.jar, jsf-api.jar) ke dalam folder WEB-INF/lib (CLASSPATH aplikasi)
- Membuat file web.xml dalam folder WEB-INF dan menambahkan kode berikut:

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="2.4" xmlns="http://java.sun.com/xml/ns/j2ee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/j2ee http://java.sun.com/xml/ns/j2ee/web-
app_2_4.xsd">
  <context-param>
    <param-name>com.sun.faces.verifyObjects</param-name>
    <param-value>>false</param-value>
  </context-param>
  <context-param>
    <param-name>com.sun.faces.validateXml</param-name>
    <param-value>>true</param-value>
  </context-param>
  <context-param>
    <param-name>javax.faces.STATE_SAVING_METHOD</param-name>
    <param-value>client</param-value>
  </context-param>
  <servlet>
    <servlet-name>Faces Servlet</servlet-name>
    <servlet-class>javax.faces.webapp.FacesServlet</servlet-class>
```

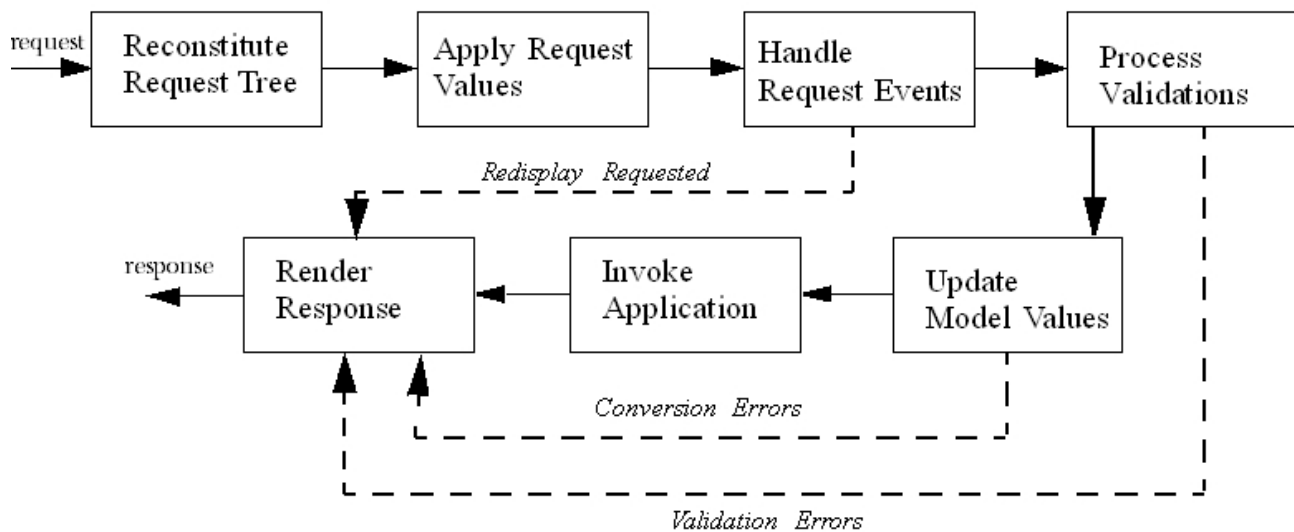
## JENI 3 – 09 Modul Praktikum JSF

```

<load-on-startup>1</load-on-startup>
</servlet>
<servlet-mapping>
  <servlet-name>Faces Servlet</servlet-name>
  <url-pattern>*.jsf</url-pattern>
</servlet-mapping>
<session-config>
  <session-timeout>
    30
  </session-timeout>
</session-config>
<welcome-file-list>
  <welcome-file>
    index.jsp
  </welcome-file>
</welcome-file-list>
</web-app>

```

### JSF Lifecycle



## JENI 3 – 09 Modul Praktikum JSF

**Percobaan 2 : Membuat aplikasi Guest Book sederhana**

Tujuan section ini adalah membuat aplikasi Guestbook sederhana.

**Langkah-langkahnya:**

- Buat package jeni3.jsf.guestbook
- Buat class Backing Bean (JavaBeans) dengan nama **GuestBookBean** berisi deklarasi field2 form, method get dan set, dan method yang dipakai untuk pemrosesan data. Berikut ini kodenya:

```
package jeni3.jsf.guestbook;

/**
 * @author mee_andto@yahoo.com
 * @version 0.5
 */
public class GuestBookBean {
    private String name;
    private String sex;
    private String email;
    private String birthdate;
    private String message;

    public String addGuest(){
        return "success";
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    //Add more here getter and setter for each private variable
}
```

Tambahkan getter dan setter.

- Definisikan bean ini dalam file **faces-config.xml**

```
<faces-config>
  <managed-bean>
    <description/>
    <managed-bean-name>guestBook</managed-bean-name>
```

## JENI 3 – 09 Modul Praktikum JSF

```
<managed-bean-class>jeni3.jsf.guestbook.GuestBookBean</managed-bean-class>
<managed-bean-scope>request</managed-bean-scope>
</managed-bean>
<navigation-rule>
  <description>

  </description>
  <from-view-id>/view/guestBookForm.jsp</from-view-id>
  <navigation-case>
    <from-action>#{guestBook.addGuest}</from-action>
    <from-outcome>success</from-outcome>
    <to-view-id>/view/guestBookView.jsp</to-view-id>
  </navigation-case>
</navigation-rule>
</faces-config>
```

- Buka file `index.jsp` dan tambahkan link untuk form guestbook, seperti kode berikut:  

```
<br/>
<a href="/view/guestBookForm.jsp">Isi Buku Tamu</a>
```
- Action **guestBookForm.jsf** akan menampilkan form isian GuestBook, dalam kasus ini belum membutuhkan bean dan NavigationRule. JSF akan menampilkan file JSP yang memiliki nama file sesuai dengan nama action tersebut.
- Pada Web Pages, buat folder **view**
- Buat file JSP dengan nama **guestBookForm.jsp** dan letakkan dalam folder **view/**. Berikut skrip dalam file **guestBookForm.jsp**:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<%@ taglib prefix="f" uri="http://java.sun.com/jsf/core" %>
<%@ taglib prefix="h" uri="http://java.sun.com/jsf/html" %>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>GuestBook Form</title>
  </head>
  <body>
    <h1>GuestBook Form</h1>
    <f:view>
      <h:form id="guestBookForm">
        <h:panelGrid columns="2" bgcolor="#e6edfd">
          <h:outputLabel for="name">
            <h:outputText value="Name"/>
          </h:outputLabel>
          <h:inputText id="name" value="#{guestBook.name}"/>

          <h:outputLabel for="sex">
            <h:outputText value="Sex"/>
        </h:panelGrid>
      </h:form>
    </f:view>
  </body>
</html>
```

## JENI 3 – 09 Modul Praktikum JSF

```

</h:outputLabel>
<h:selectOneMenu id="sex" value="#{guestBook.sex}" title="select one option">
<f:selectItem id="s0" itemLabel="-select one-" itemValue="" />
    <f:selectItem id="s1" itemLabel="Male" itemValue="male" />
    <f:selectItem id="s2" itemLabel="Female" itemValue="female" />
</h:selectOneMenu>
<h:outputLabel for="email">
<h:outputText value="Email"/>
</h:outputLabel>
<h:inputText id="email" value="#{guestBook.email}"/>

<h:outputLabel for="birthdate">
<h:outputText value="Birthdate"/>
</h:outputLabel>
<h:inputText id="birthdate" value="#{guestBook.birthdate}"/>

<h:outputLabel for="message">
<h:outputText value="Message"/>
</h:outputLabel>
<h:inputTextarea id="message" value="#{guestBook.message}"/>

<h:commandButton type="reset" value="Reset"/>
<h:commandButton type="submit" action="#{guestBook.addGuest}" value="Add"/>
</h:panelGrid>
</h:form>
</f:view>
</body>
</html>

```

- Masih dalam folder **view**, buat file JSP untuk menampilkan data Guest. Nama file **guestBookView.jsp**.

```

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<%@ taglib prefix="f" uri="http://java.sun.com/jsf/core" %>
<%@ taglib prefix="h" uri="http://java.sun.com/jsf/html" %>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>GuestBook View</title>
</head>
<body>
<f:view>
<h:panelGrid columns="2" bgcolor="#e6edfd">
    <f:facet name="header">
<h:outputText style="font-size:14px" value="Your's Datas"/>
    </f:facet>
    <h:outputLabel for="name">
<h:outputText value="Name"/>
    </h:outputLabel>
    <h:outputText id="name" value=": #{guestBook.name}"/>

```

## JENI 3 – 09 Modul Praktikum JSF

```
<h:outputLabel for="sex">
<h:outputText value="Sex"/>
</h:outputLabel>
<h:outputText id="sex" value=": #{guestBook.sex}"/>

<h:outputLabel for="email">
<h:outputText value="Email"/>
</h:outputLabel>
<h:outputText id="email" value=": #{guestBook.email}"/>

<h:outputLabel for="birtDate">
<h:outputText value="BirthDate"/>
</h:outputLabel>
<h:outputText id="birthDate" value=": #{guestBook.birthDate}"/>

<h:outputLabel for="message">
<h:outputText value="Message"/>
</h:outputLabel>
<h:outputText id="message" value=": #{guestBook.message}"/>
</h:panelGrid>
</f:view>
</body>
</html>
```

- Run- Run Main Project

