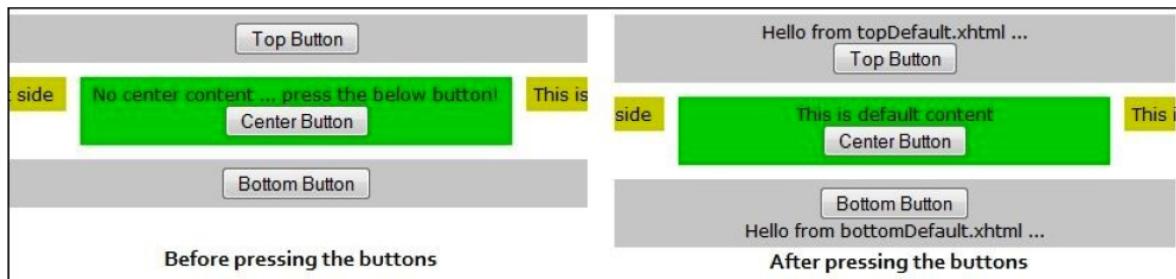


## Templates IV

### The basic Page Layout with buttons to pass arguments



1. Create Web App lab04-templates4
2. Download the 2 css posted and put them under folder resources/css

The image shows the NetBeans IDE interface with two CSS files open:

- cssLayout.css**: A CSS file containing the following code:

```
1 #top {  
2     position: relative;  
3     background-color: #cccccc;  
4     padding: 5px;  
5     margin: 0px 0px 10px 0px;  
6     text-align:center;  
7 }  
8 #bottom {  
9     position: relative;  
10    background-color: #cccccc;  
11    padding: 5px;  
12    margin: 10px 0px 0px 0px;  
13    text-align:center;  
14 }  
15 #left {  
16     float: left;  
17     background-color: #cccc11;  
18     position: relative;  
19     padding: 5px;  
20     width: 150px;  
21     text-align:center;  
22 }  
23 #right {  
24     float: right;  
25     position: relative;  
26     background-color: #cccc11;  
27     padding: 5px;  
28     width: 150px;  
29     text-align:center;  
30 }  
31 #content {  
32     background-color: #00cc00;  
33     padding: 5px;  
34     margin: 0px 170px 0px 170px;  
35     text-align:center;  
36 }
```

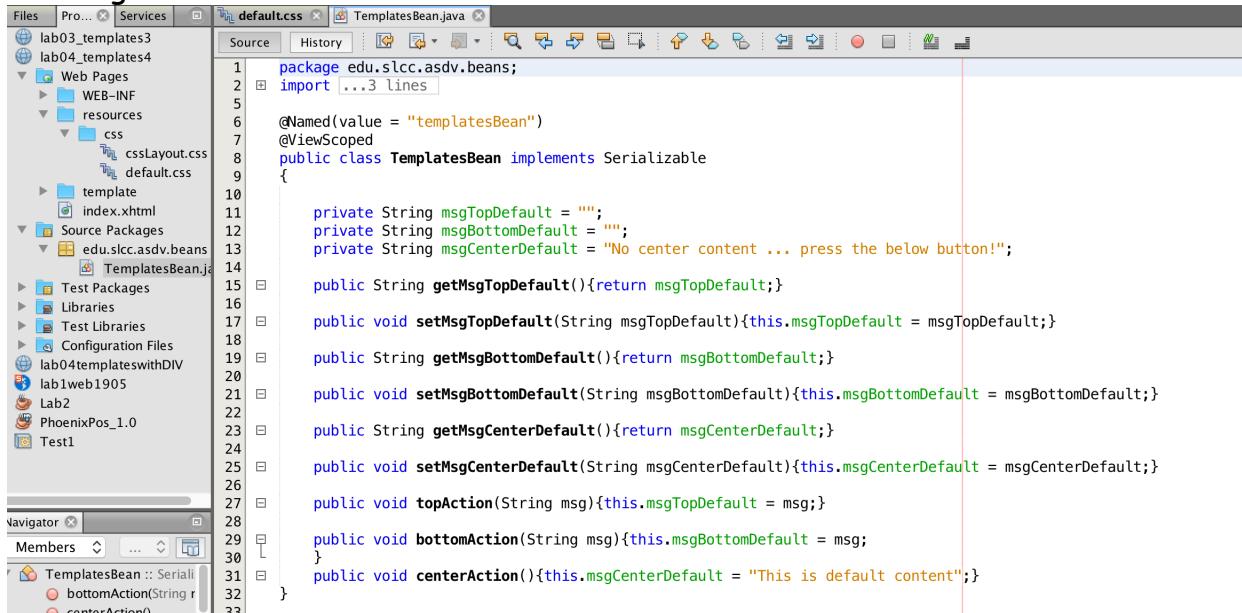
- defaults.css**: A CSS file containing the following code:

```
1 body {  
2     background-color: #ffffff;  
3     font-size: 12px;  
4     font-family: Verdana, "Verdana CE", Arial,  
5     "Arial CE", "Lucida Grande CE",  
6     lucida, "Helvetica CE",  
7     sans-serif;  
8     color: #000000;  
9     margin: 10px;  
10 }  
11 }
```

### 3. Create a ViewScoped bean with instance String vars:

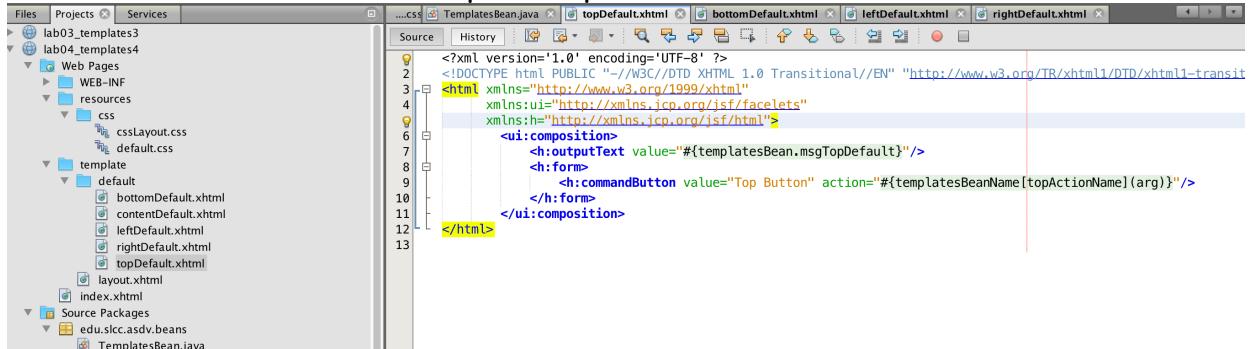
msgTopDefault  
msgBottomDefault;  
msgCenterDefault

setters, getters from Insert Code. Type the 3 action methods topAction, bottomAction and centerAction to be called upon clicking a button and pass arguments to the caller.



```
1 package edu.slcc.asdv.beans;
2 import ... 3 lines
3
4 @Named(value = "templatesBean")
5 @ViewScoped
6 public class TemplatesBean implements Serializable
7 {
8
9     private String msgTopDefault = "";
10    private String msgBottomDefault = "";
11    private String msgCenterDefault = "No center content ... press the below button!";
12
13    public String getMsgTopDefault(){return msgTopDefault;}
14
15    public void setMsgTopDefault(String msgTopDefault){this.msgTopDefault = msgTopDefault;}
16
17    public String getMsgBottomDefault(){return msgBottomDefault;}
18
19    public void setMsgBottomDefault(String msgBottomDefault){this.msgBottomDefault = msgBottomDefault;}
20
21    public String getMsgCenterDefault(){return msgCenterDefault;}
22
23    public void setMsgCenterDefault(String msgCenterDefault){this.msgCenterDefault = msgCenterDefault;}
24
25    public void topAction(String msg){this.msgTopDefault = msg;}
26
27    public void bottomAction(String msg){this.msgBottomDefault = msg;}
28
29    public void centerAction(){this.msgCenterDefault = "This is default content";}
30
31 }
```

### 4. Create the DEFAULT template topDefault



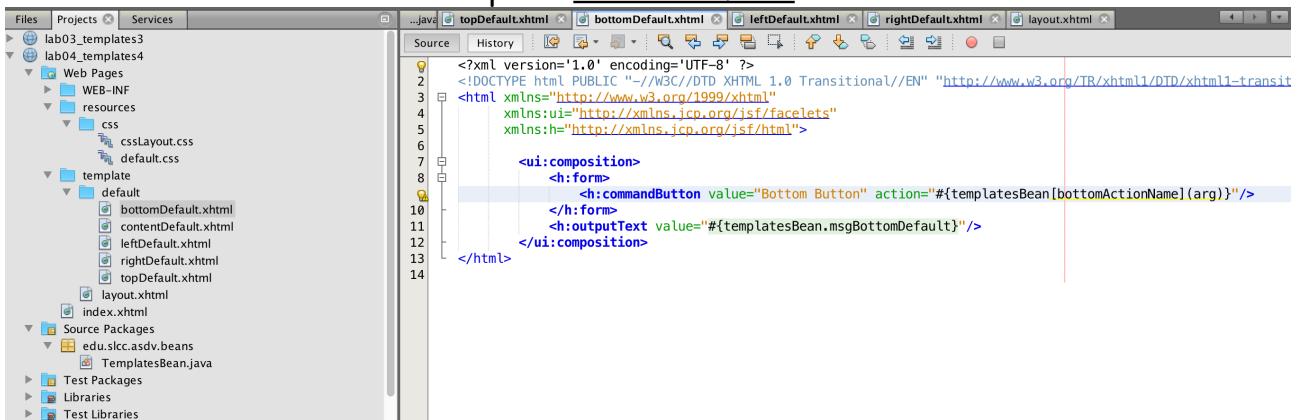
```
<?xml version='1.0' encoding='UTF-8' ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
      xmlns:h="http://xmlns.jcp.org/jsf/html">
    <ui:composition>
        <h:outputText value="#{templatesBean.msgTopDefault}" />
        <h:form>
            <h:commandButton value="Top Button" action="#{templatesBeanName[topActionName](arg)}"/>
        </h:form>
    </ui:composition>
</html>
```

action="#{templatesBeanName[topActionName]}

templatesBeanName will be a name the layout file. The name is not necessary as you will see in bottom template

topActionName is the action method in the bean

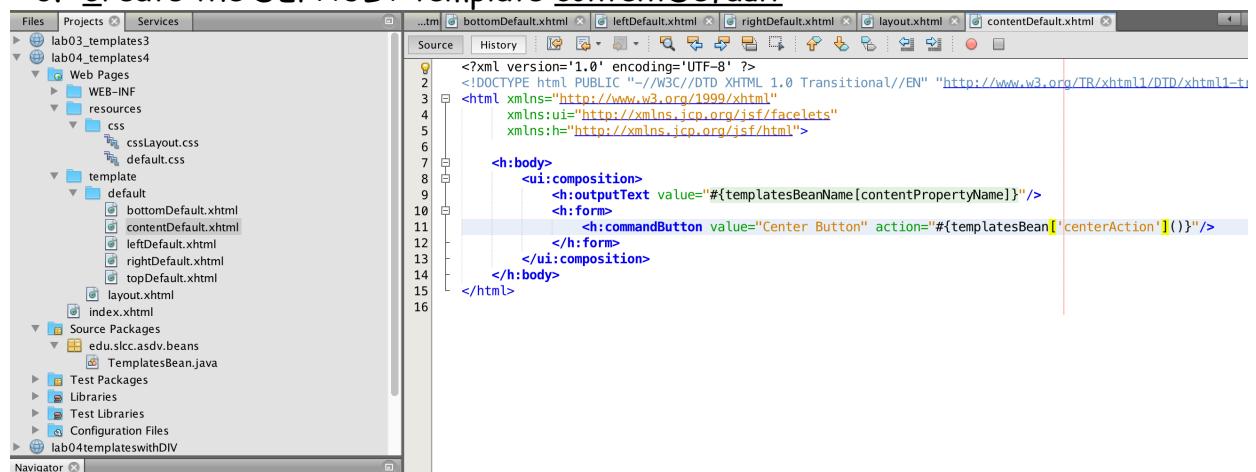
## 5. Create the DEFAULT template bottomDefault



```
<?xml version='1.0' encoding='UTF-8' ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
      xmlns:h="http://xmlns.jcp.org/jsf/html">

    <ui:composition>
        <h:form>
            <h:commandButton value="Bottom Button" action="#{templatesBean[bottomActionName](arg)}"/>
        </h:form>
        <h:outputText value="#{templatesBean.msgBottomDefault}"/>
    </ui:composition>
</html>
```

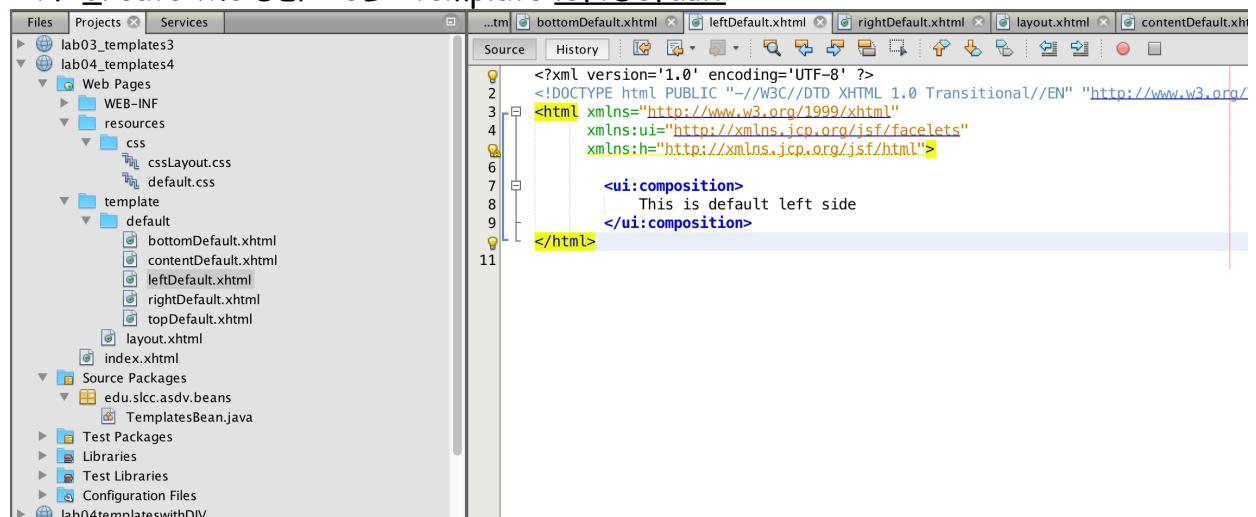
## 6. Create the DEFAULT template contentDefault



```
<?xml version='1.0' encoding='UTF-8' ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
      xmlns:h="http://xmlns.jcp.org/jsf/html">

    <h:body>
        <ui:composition>
            <h:outputText value="#{templatesBeanName[contentPropertyName]}"/>
            <h:form>
                <h:commandButton value="Center Button" action="#{templatesBean['centerAction']}()"/>
            </h:form>
        </ui:composition>
    </h:body>
</html>
```

## 7. Create the DEFAULT template leftDefault



```
<?xml version='1.0' encoding='UTF-8' ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
      xmlns:h="http://xmlns.jcp.org/jsf/html">

    <ui:composition>
        <ui:composition>
            This is default left side
        </ui:composition>
    </ui:composition>
</html>
```

## 8. Create the DEFAULT template rightDefault

The screenshot shows the NetBeans IDE interface with the 'Source' tab selected. The code editor displays the 'rightDefault.xhtml' file. The code includes Facelet tags like <ui:composition> and <ui:insert>. A comment 'This is default right side' is present between the composition tags. The left sidebar shows a project structure with 'lab04\_templates4' selected, containing 'Web Pages', 'resources', 'template', and 'index.xhtml' files.

```
<?xml version='1.0' encoding='UTF-8' ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/1999/xhtml">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
      xmlns:h="http://xmlns.jcp.org/jsf/html">

    <ui:composition>
        This is default right side
    </ui:composition>

```

## 9. Create the layout.xhtml and put in the topDefault

The screenshot shows the NetBeans IDE interface with the 'Source' tab selected. The code editor displays the 'layout.xhtml' file. It contains an <h:head> section with <outputStylesheet> tags for 'default.css' and 'cssLayout.css'. The <h:body> section features a <div id="top"> element. Inside it, there's an <ui:insert name="top"> tag followed by an <ui:include src="/template/default/topDefault.xhtml"> tag. The left sidebar shows a project structure with 'lab04\_templates4' selected, containing 'Web Pages', 'resources', 'template', and 'index.xhtml' files.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
      xmlns:h="http://xmlns.jcp.org/jsf/html">

    <h:head>
        <outputStylesheet library="css" name="default.css"/>
        <outputStylesheet library="css" name="cssLayout.css"/>
        <title>My Template</title>
    </h:head>

    <h:body>
        <div id="top">
            <ui:insert name="top">
                <ui:include src="/template/default/topDefault.xhtml">
                    <ui:param name="templatesBeanName" value="#{templatesBean}" />
                    <ui:param name="topActionName" value="topAction"/>
                    <ui:param name="arg" value="Hello from topDefault.xhtml ..."/>
                </ui:include>
            </ui:insert>
        </div>
        <div ...23 lines />
        <div ...9 lines />
    </h:body>

```

## 10. Place inside <div>, the leftDefault, the rightDefault and the contentDefault

The screenshot shows the NetBeans IDE interface with the 'Source' tab selected. The code editor displays the 'layout.xhtml' file. It contains an <h:head> section with a title. The <h:body> section has a <div id="content"> element. Inside this, there are three nested <ui:insert> tags with corresponding <ui:include> tags: 'left', 'right', and 'content'. The left sidebar shows a project structure with 'lab04\_templates4' selected, containing 'Web Pages', 'resources', 'template', and 'index.xhtml' files.

```
<title>My Template</title>
</h:head>

<h:body>
    <div ...9 lines />

    <div>
        <div id="left">
            <ui:insert name="left">
                <ui:include src="/template/default/leftDefault.xhtml" />
            </ui:insert>
        </div>

        <div id="right">
            <ui:insert name="right">
                <ui:include src="/template/default/rightDefault.xhtml" />
            </ui:insert>
        </div>

        <div id="content">
            <ui:insert name="content">
                <ui:include src="/template/default/contentDefault.xhtml">
                    <ui:param name="templatesBeanName" value="#{templatesBean}" />
                    <ui:param name="contentPropertyName" value="msgCenterDefault" />
                </ui:include>
            </ui:insert>
        </div>
    </div>
    <div ...9 lines />
</h:body>

```

## 11. Place inside <div>, the bottomDefault

```

<?xml version='1.0' encoding='UTF-8' ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets"
      xmlns:h="http://xmlns.jcp.org/jsf/html">
<head>
    <h:outputStylesheet library="css" name="default.css"/>
    <h:outputStylesheet library="css" name="cssLayout.css"/>
    <title>My Template</title>
</head>
<body>
    <div ...9 lines />
    <div ...23 lines />
    <div id="bottom">
        <ui:insert name="bottom">
            <ui:include src="/template/default/bottomDefault.xhtml">
                <ui:param name="templatesBeanName" value="#{templatesBean}" />
                <ui:param name="bottomActionName" value="bottomAction" />
                <ui:param name="arg" value="Hello from bottomDefault.xhtml ..." />
            </ui:include>
        </ui:insert>
    </div>
</body>
</html>

```

## 12. Use composition in the index.xhtml

```

<?xml version='1.0' encoding='UTF-8' ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:h="http://xmlns.jcp.org/jsf/html"
      xmlns:ui="http://xmlns.jcp.org/jsf/facelets">
<head>
    <title></title>
</head>
<body>
    <ui:composition template="template/layout.xhtml">
    </ui:composition>
</body>
</html>

```

## 13. Clean build and run:

