IBM WebSphere Development Studio Client for iSeries

Refacing an iSeries Green Screen Application using WebSphere Development Studio Client Version 5.0

Customization Exercises

Overall Lab Guide

The objective of the IBM WebFacing Tool lab is to have the students work with an existing 5250 application and use the IBM WebFacing Tool to create a browser based user interface. This lab is an extension of the **Refacing an iSeries Green Screen Application using WebSphere Development Studio Client Version 5.0** Lab which demonstrates how to use the IBM WebFacing Tool to generate the base application. This lab shows customization techniques that can be used to enhance the base application. It assumed the student already has or is familiar with how to use the IBM WebFacing Tool to create this base application.

The Steps in this Lab

1. Using the Style Properties
2. Using a Customized Sign-on Dialog
3. Hyperlinks and Hiding Fields
4. Changing Button Sizes
5. Changing the Default Image
6. Adding Tool Tips
7. Using JavaScript to add a Clock
8. Change the Initial page with web tools

Using the Style properties

Using the Style Wizard to change the IBM WebFaced application user interface. During this exercise, you will change the User Interface of your application by using the Style properties that are part of the IBM WebFacing Tool environment. The style changes will be applied on a project level, so all pages in a project will contain the changes you apply to a style. In this lab we want you to change the text color and font for all highlighted fields. Also you will learn how to apply changes to command key definitions that do not follow the Common User Access (CUA) rules.

The following tasks will be covered in this lab:

? Starting the properties dialog
? Creating a new style
? Working with Style settings in the change style wizard
? Specifying the new style to be used for this project
? Refreshing the project with the new style

What You Should be Able to Do

As a result of this exercise you will be able to change a style to tailor the web interface to your needs:

? Create a new style using the IBM WebFacing Style properties
? Use the field level property pages to change the looks of your web pages
? Change the project to use a different style

Using the IBM WebFacing Style properties

During this exercise, you will use the IBM WebFacing Style properties to tailor your web user interface. Highlighted fields in the 5250 panels will get changed to show the fact they are highlighted a little bit more in the web user interface. You will change the IBM WebFacing conversion results of highlighted fields so the conversion will generate code to apply a yellow text color and a bigger font for these parts.

__ 1. **Invoking the WebFacing Style properties dialog**

? Start the WebSphere Development Studio Client workbench and open the WebFacing perspective, if it is not up and opened already

? In the WebFacing perspective, locate the WebFacing project you are working with in this Lab.

? Right mouse click on the WebFacing project node wflabxx
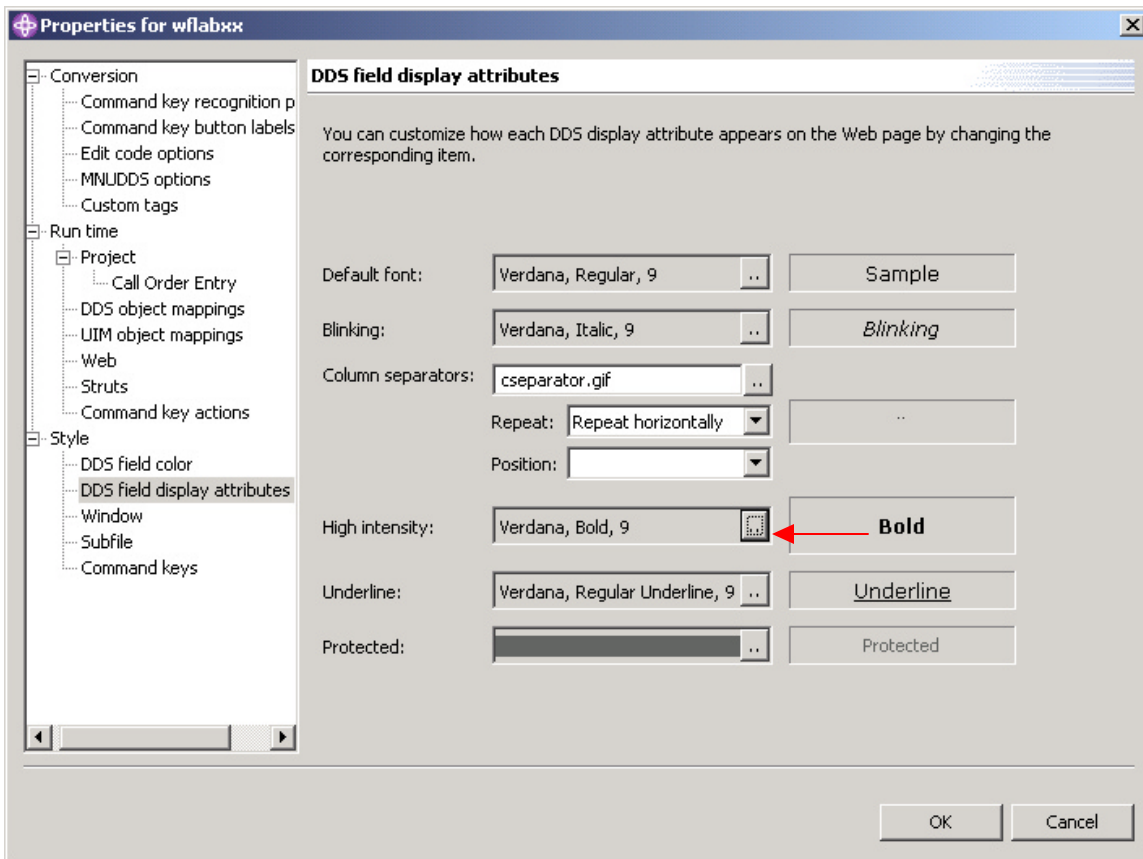
? Select **Properties** from the pop-up menu

✍

The WebFacing project **properties** dialog will show:
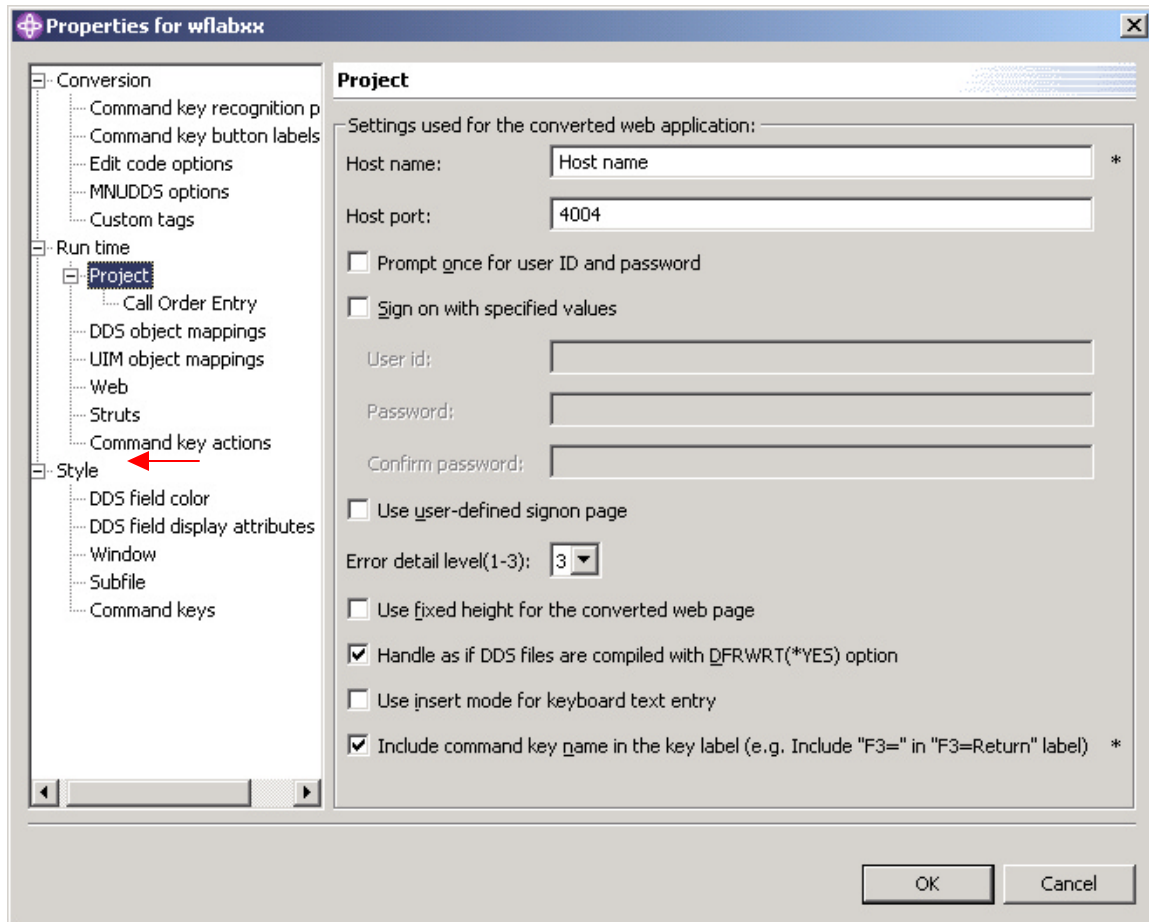
? Select the **Style--DDS field display attributes** node in the list on the left side, the arrow in the figure above indicates where to find the node.
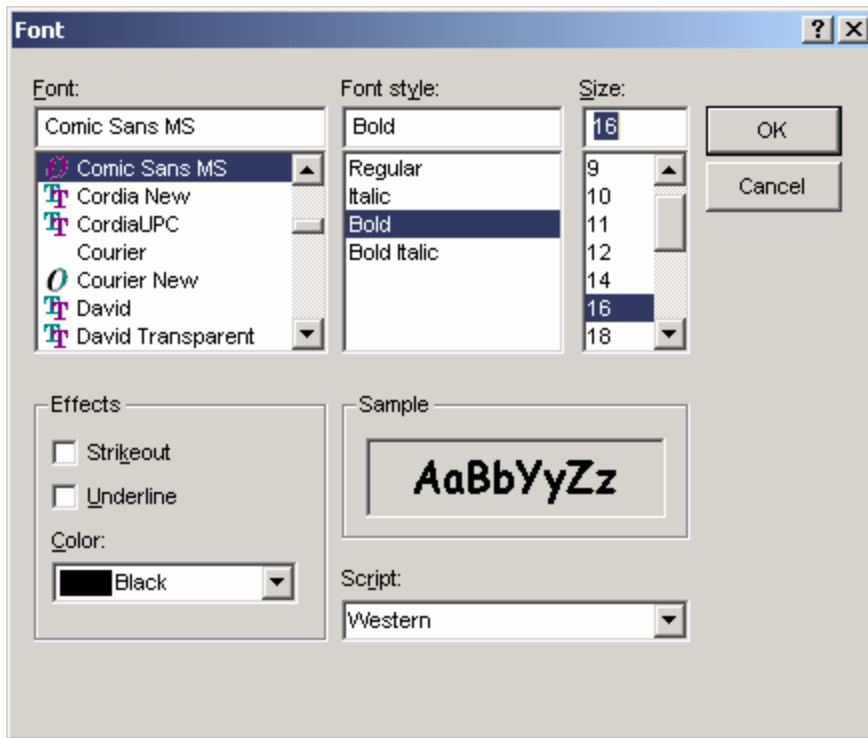
The **DDS field display attributes** page will appear on the right side of the dialog:

? Click the **..** button in the **High intensity** combo box.

The **Font** dialog appears.

- ? Select **Font: Comic Sans MS**
- ? Select **Font style: Bold**
- ? Select **Size: 16**
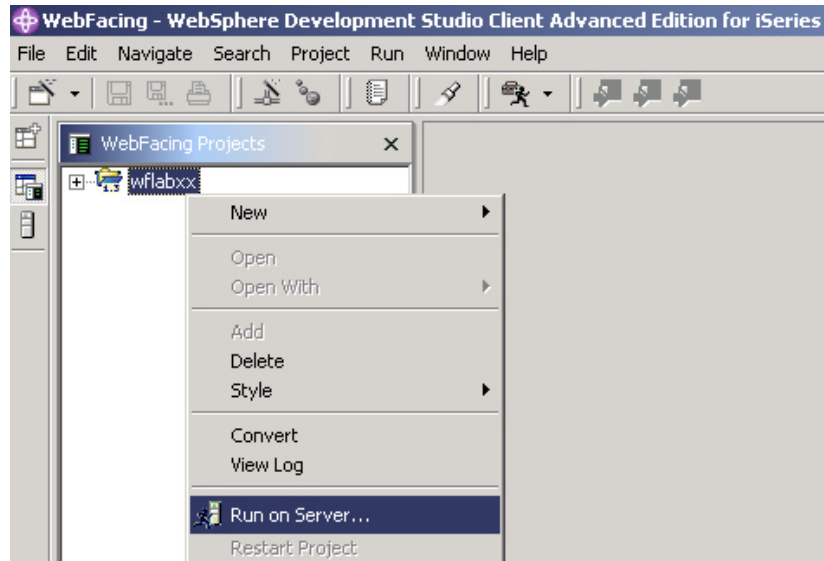- ? Click the **OK** button on this dialog

This will change font size and font appearance for parts with the high intensity attribute active.

- ? Click the **OK** button on the properties dialog

Now you are back in the workbench

__ 2. **Using the WebSphere Application Server — Express V5.0 test environment to show the changes**

- ? Right mouse click on the **wflabxx project** icon

? Select ***Run on server*** from the pop-up menu

A pop-up window will ask for you to choose which server you would like to run on. Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK.**
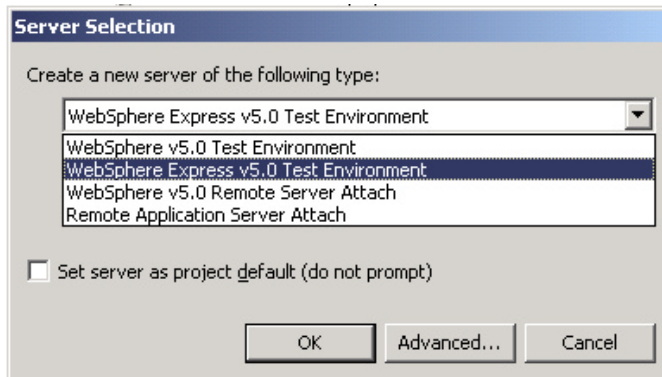
Use the WebSphere Application Server test environment to display the changes

You will see the first screen of your application.
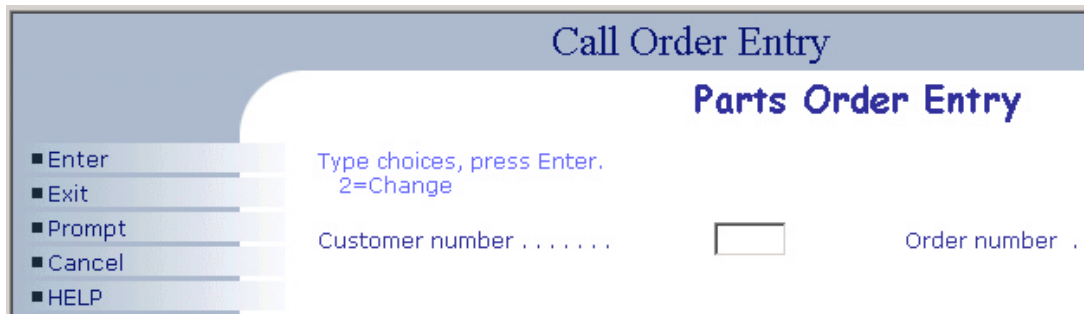
? Notice the different font and font size in some of the text; these are the **highlighted** areas of your 5250 screen.
? Prompt for the customer,
? You might not have noticed it before; there is still a **command key description** at the bottom of the customer selection window.

Using the User Defined Signon

Using the User Defined Signon to create a new sign on page.

During this exercise, you will change the runtime behavior of your application. Instead of using the integrated signon, the one you used when you selected the members to convert your DDS source, you will now modify the default signon.

The following tasks will be covered in this lab:

?   Select the properties for User Defined Signon
?   Modifying the default logon page

What You Should be Able to Do

As a result of this exercise you will be able to secure your application by forcing authentication before the application gets invoked.

?   Understand the how to modify the logon page
?   Change the project properties to enable User Defined Signon

__ 1. **Using the project properties dialog**

During this exercise you will use the **Runtime**, **Project** properties page to select **Use user-defined signon page**

Start the workbench and open the WebFacing perspective, if it is not up and running already.

In the WebFacing Perspective in the project view,
? Right mouse click on the **wflabxx** project icon
? Select **Properties** from the pull down menu

The **Properties for wflabxx** dialog will appear:
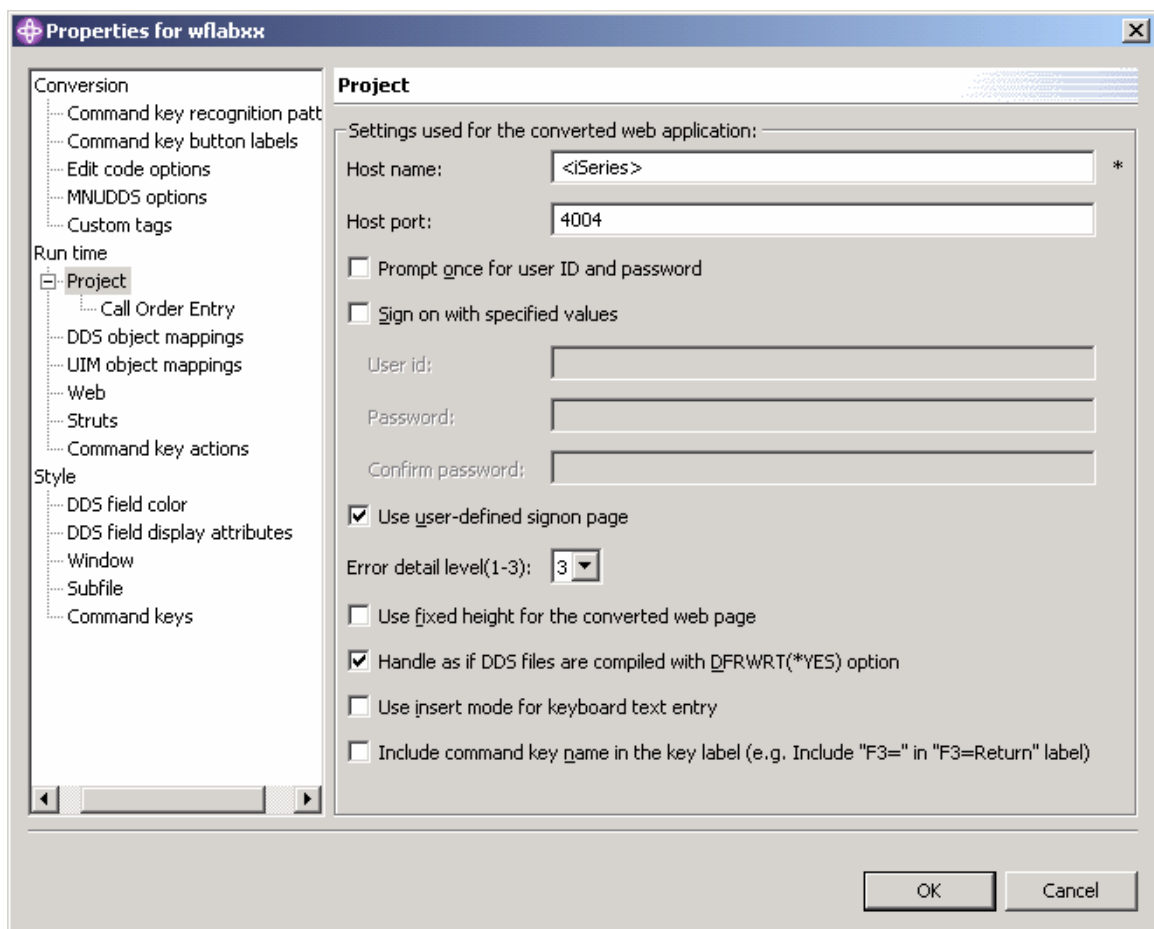
? Under **Runtime** … Click on **Project**
? Check the **Use user-defined signon page** check box, in the middle of the dialog
? Click the **OK** push button, at the bottom of this dialog

You are back in the workbench.

You have changed the logon behavior for this link (application).

Modifying logon.jsp

You are currently working with the WebSphere Development Studio Client v5 beta. In the beta, there are two different login files — html and jsp. For a STRUTS based project, the jsp files are used. For a non STRUTS projects, the html files are used. In the GA version of WebSphere Development Studio Client, you will only be able to see the file that pertains to your type of project.
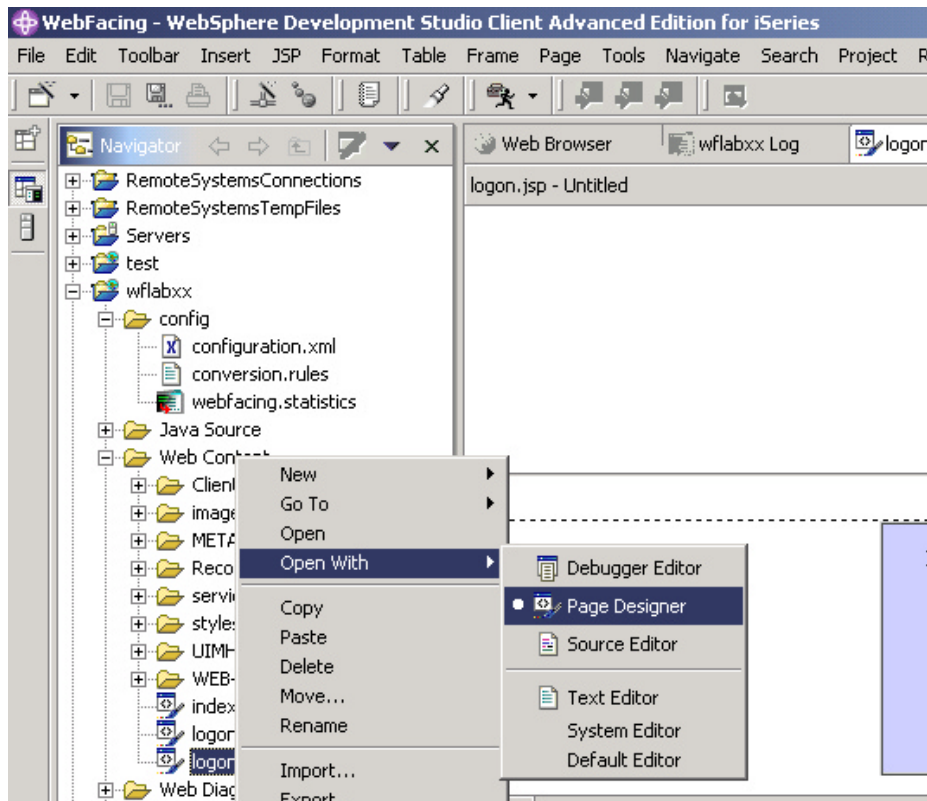
? Make sure you are in the WebFacing Perspective

? Select the Navigator tab at the bottom of the WebFacing Perspective window
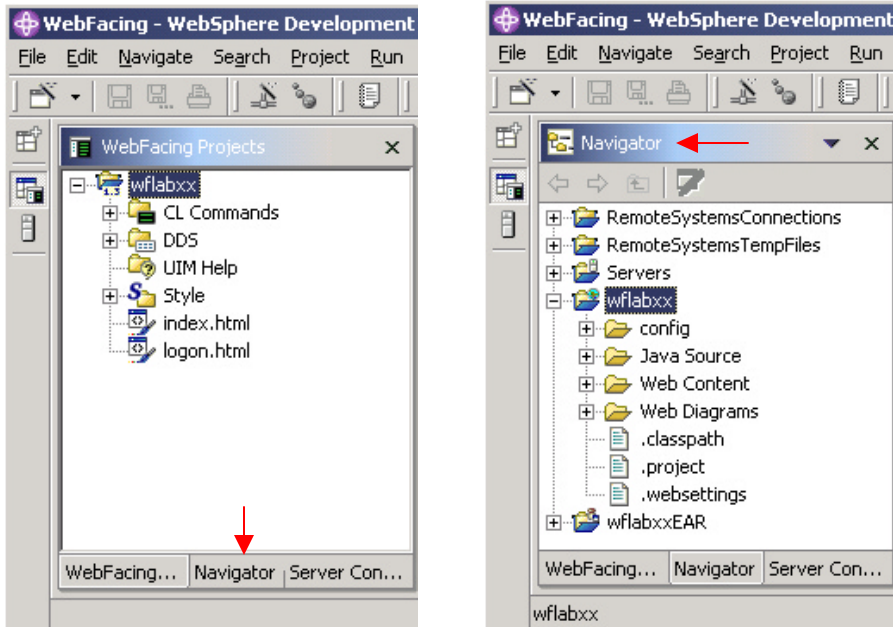
? Once in the Navigator, expand your WebFacing project wflabxx and then the Web Content Folder. In the Web Content Folder, you will find the logon.jsp
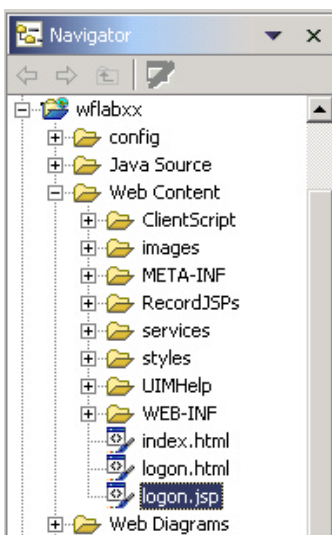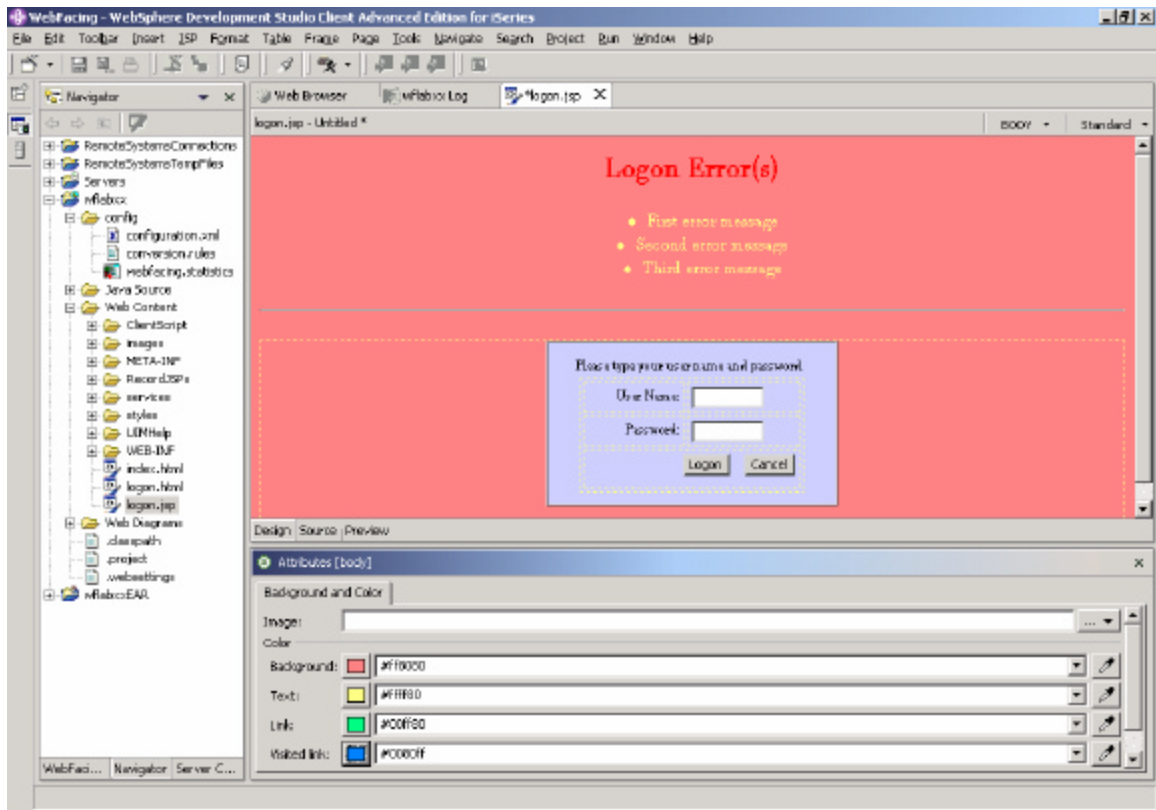
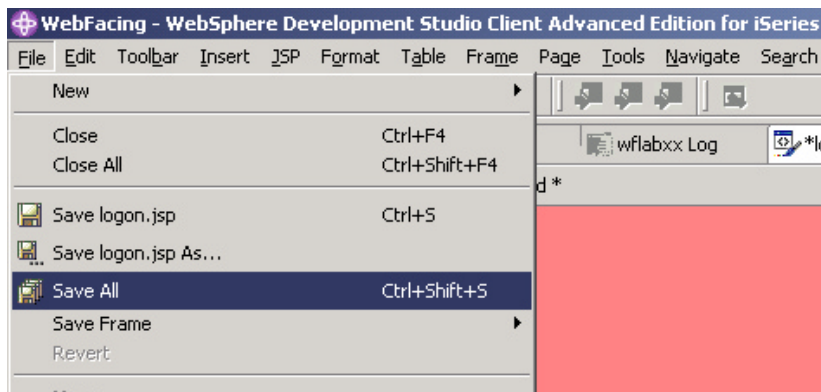? Select logon.jsp, right click on it select open with Page Designer.

? Note that there is a Design, Source, and Preview view of the jsp. Feel free to brows the other views.
? Using the Attributes [body] window, change the colors of the logon.jsp so that we can identify that the modified jsp is being used.
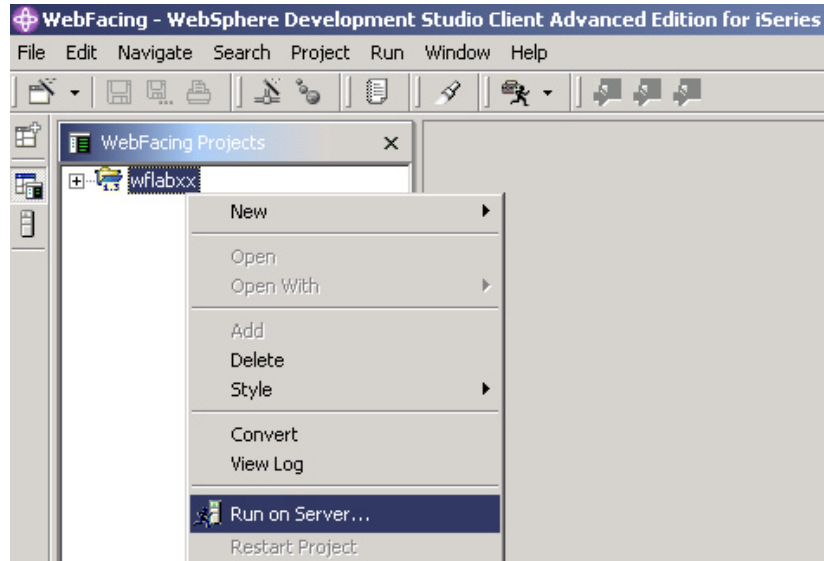
? Save your work by clicking Save on the top menu bar and then Save All
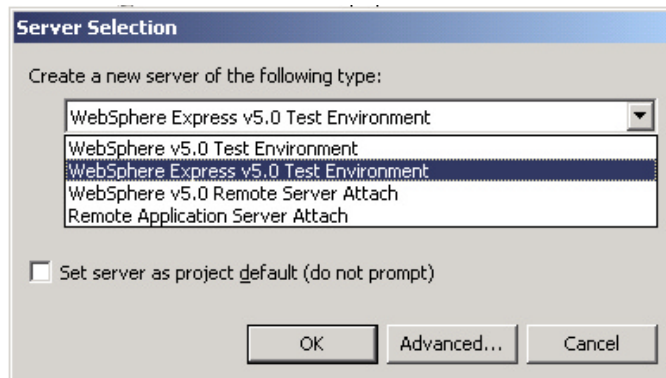
Using the WebSphere Application Server — Express V5.0 test environment to show the changes

? Right mouse click on the **wflabxx project** icon

? Select ***Run on server*** from the pop-up menu

A pop-up window will ask for you to choose which server you would like to run on. Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK.**

Use the WebSphere Application Server test environment to display the changes

? Switch back to the WebFacing Projects View.
? Right mouse click on the **wflabxx project** icon
? In your browser pane, click on the top **Order Entry Application** link and sign in with your iSeries user name and password when prompted.

Please type your user name and password.

User Name:

Password:

Logon   Cancel

Hyperlinks and Hiding Fields

Using Web Settings to change the user interface of the WebFaced application

During this exercise, you will change the User Interface of your application by using **CODE designer**. **CODE Designer** is the GUI based screen design tool for 5250 panels. For the IBM WebFacing Tool, we have added a new function to **CODE Designer — Web Settings.** Web Settings allows you to change certain aspects of the user interface related to the WebFacing conversion process. **CODE Designer** will store this Web Setting information as comment lines in the DDS source. These specific DDS source comment lines will be picked up at WebFacing conversion and applied to the WebFaced user interface.

You will not be able to use SDA for your DDS source after you used Web Settings.

The following tasks will be covered in this lab:

? Specifying the DDS source member to work with
? Starting CODE Designer
? Working with Web Settings in CODE Designer
? Reconverting the application

As a result of this exercise, you will be able to enhance your WebFaced user interface for the browser environment.

What You Should be Able to Do

As a result of this exercise, you will be able to change the DDS source and add WebFacing specific Web Settings to it.

? Use CODE Designer to access DDS source
? Use Web Settings to add web user interface changes
? Reconvert the changed DDS

Using CODE Designer to access DDS display file source

During this exercise, you will use **CODE Designer** to add some **Web Settings** to the DDS source. We want you to improve the web **user interface** for the <u>customer list window</u>.

In this window, currently users have to enter a **1** in the options field to select a specific customer from the subfile. We want you to change this because it is not the way you typically select things in a web interface. On a web page, a link would be more natural to cause a selection of a record to happen.

You will change the second column **customer name** in the subfile from a simple text field to a link. The WebFacing conversion will add logic to the user interface, to accomplish the following:

? When the end user is clicking on this link,
? Under the covers the options field will be filled with a **1** and

? An **Enter** key press will be invoked.
The changed user interface still returns to the application the same information as before the Web Setting was applied, but the user interface appears more Web like to the end user. The application itself does not have to be changed.

__ 1. **Start the WebSphere Development Studio Client workbench**, if it is not up and running

   ? In the workbench, select the *WebFacing* perspective
   ? Make sure you are on the **project** page and not the **navigator** notebook page

   ? Expand **your project** in the tree view by clicking on the **+**
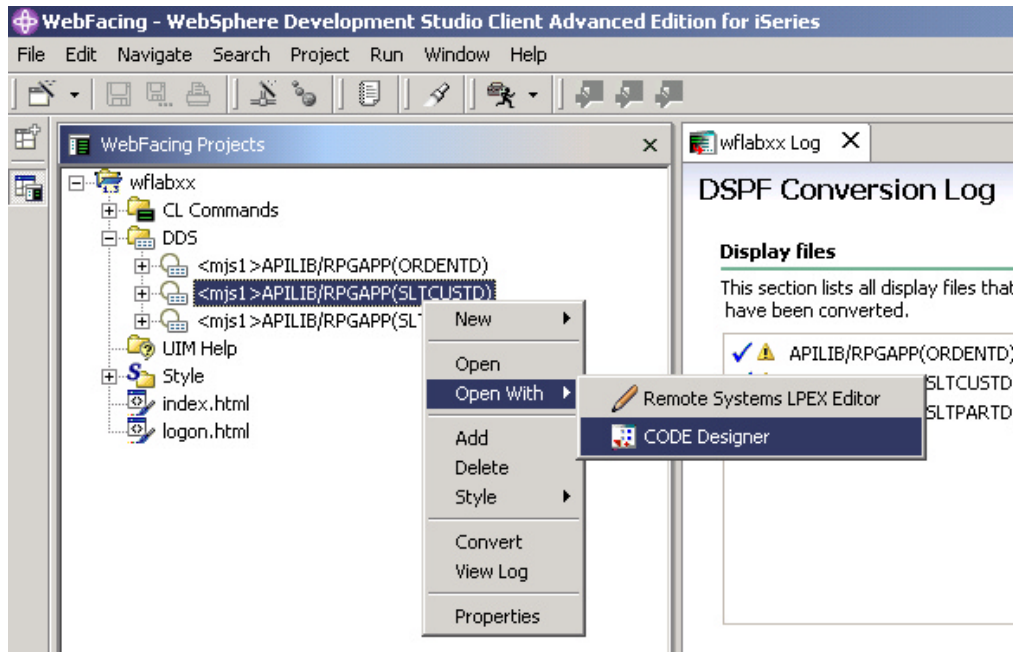
__ 2. **Modifying DDS Member Through CODE Designer**

   ? Expand the **DDS folder**
   ? Right mouse click on the *SLTCUSTD* member

Start the Code Designer by:

   ? Selecting *Open With —>CODE Designer* from the pop-up menu

   CODE Designer is loading the member. This will take a moment.

Eventually, you will see the **DDS member** loaded in CODE Designer as shown
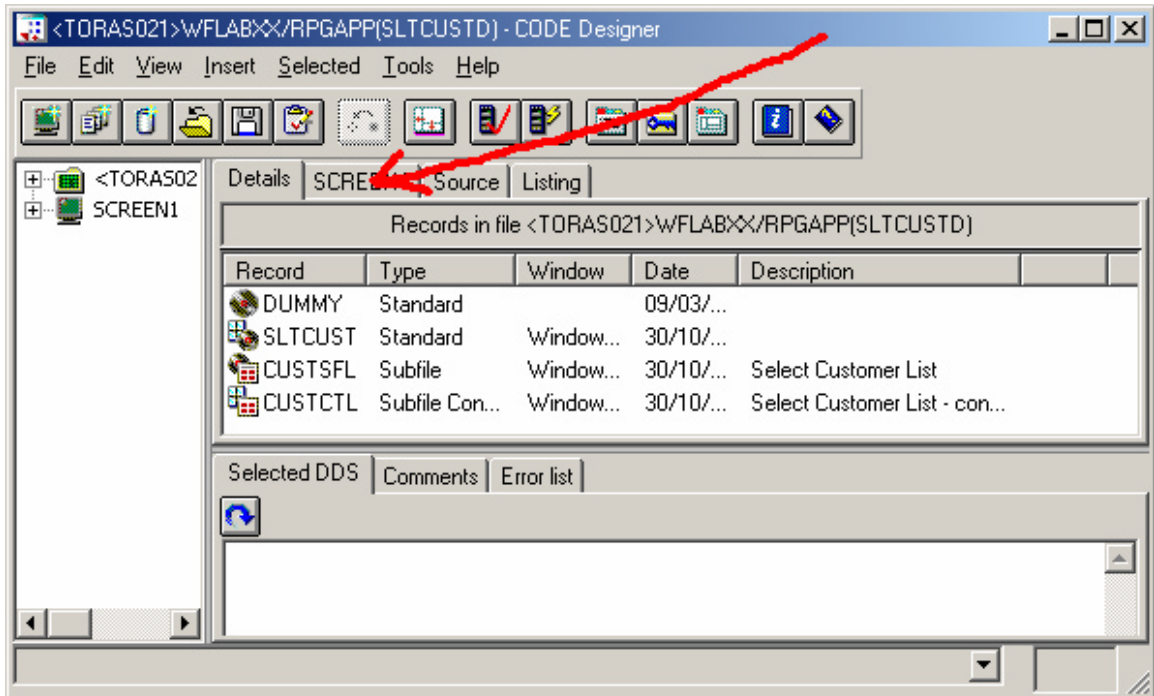
below:
Select the **SCREEN1** tab on the notebook, the arrow in the figure above, points at the tab.

You should see a dialog similar to the figure below:
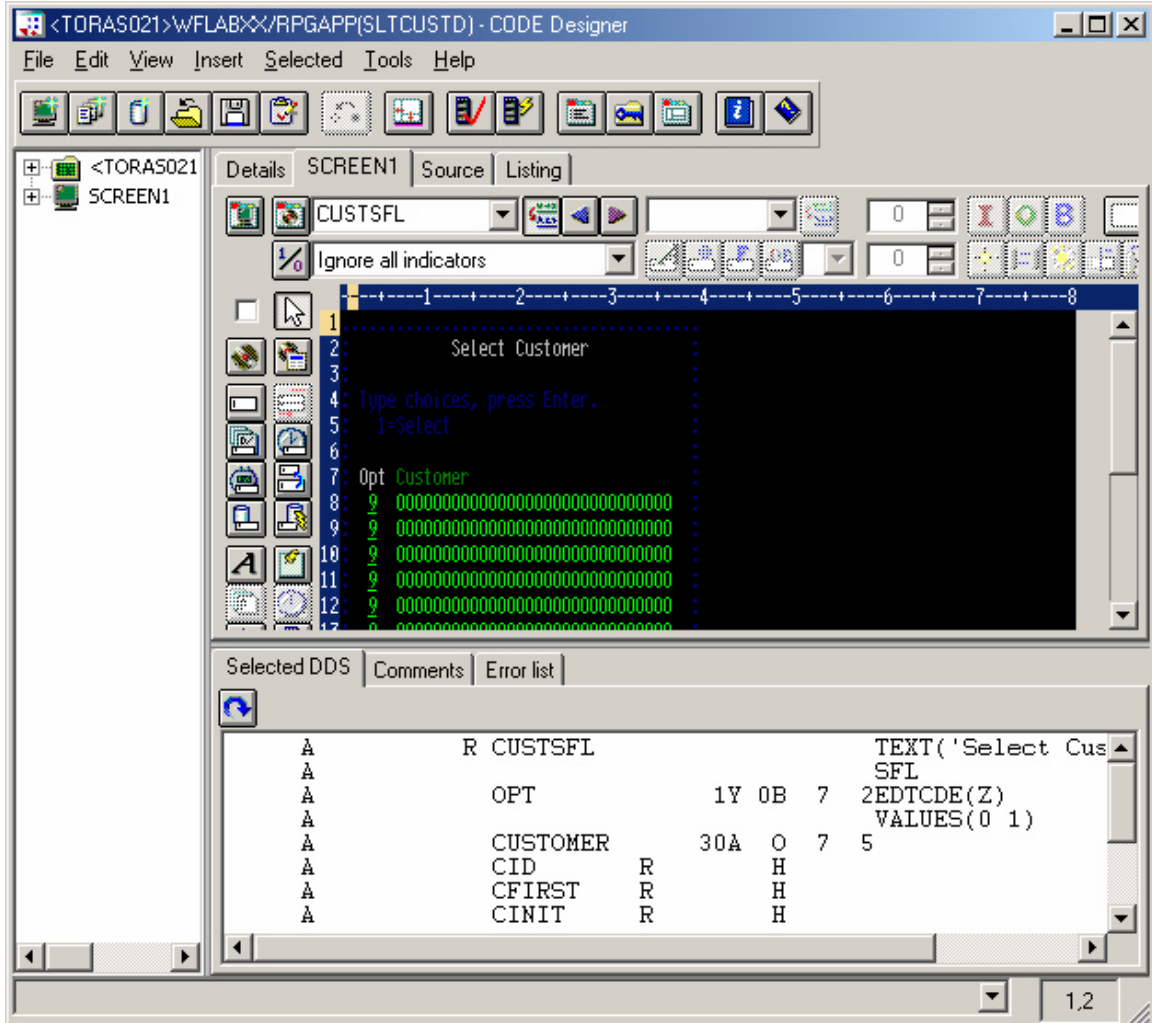
You will work with the green screen image in CODE Designer, do you recognize the screen? It is the customer selection list we want you to change it, so it appears more "webbish" to the end user.

> Click on the first **row** second **column** in the subfile (**the customer name field**) see the figure below.
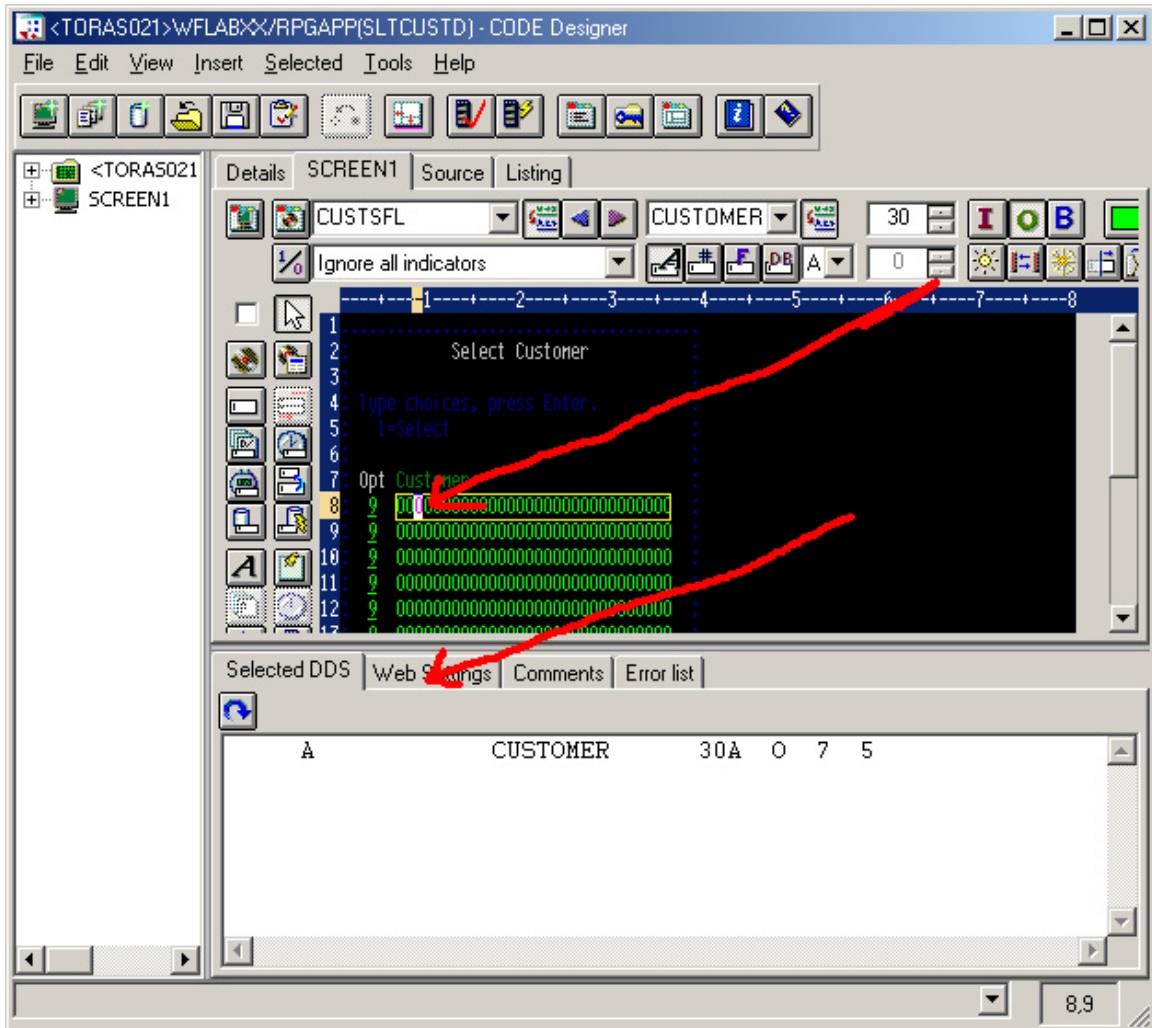
Applying Web Settings

You will notice that the notebook tabs of the notebook at the **bottom** of the designer dialog are context sensitive and changed as soon as you selected the customer field.

? Select the **Web Settings tab** in this notebook

The CODE Designer window appearance will be similar to the figure below.
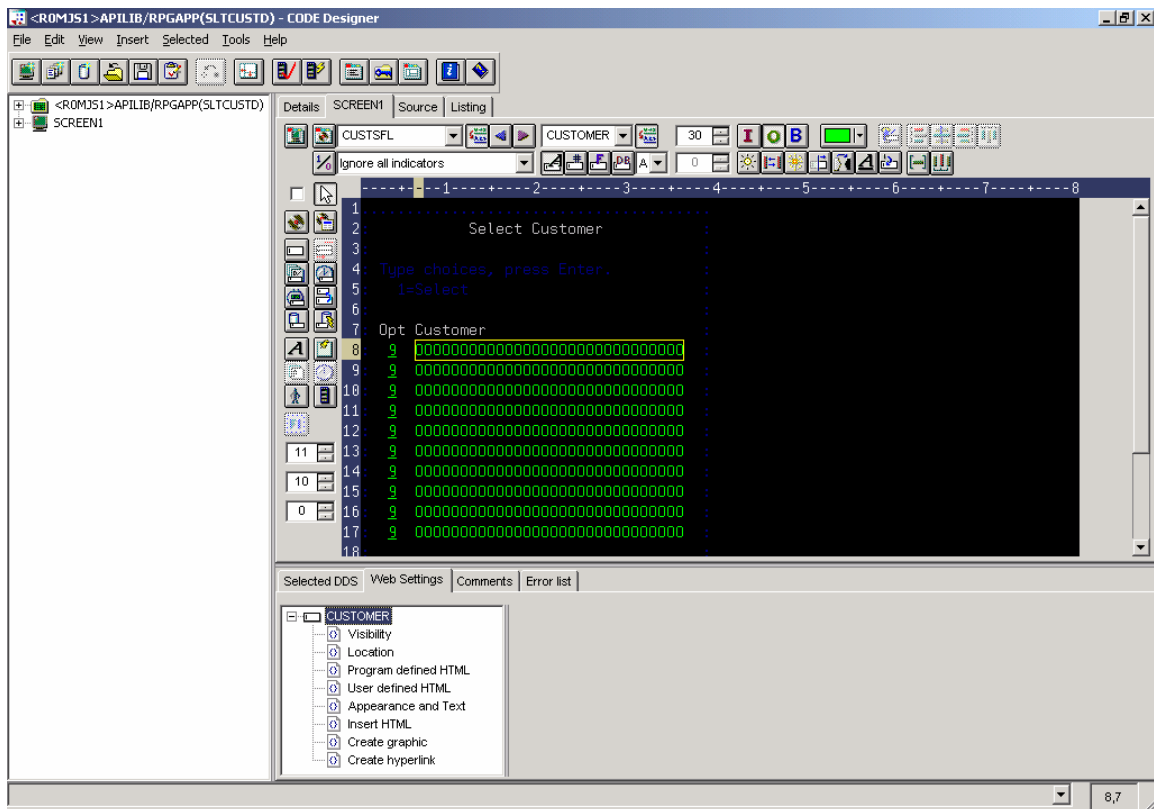
On the Web Settings page on the bottom of the CODE Designer window:

? Locate the list that shows the different Web Settings available for the customer field
? Scroll down to the **bottom** of the list
? Select Create hyper link
? Check the **Create hyperlink check box** in the dialog on the right side of the list
? Select the Set *Action hyperlink* radio button
? Select the Position cursor to the field check box
? Select **&(OPT)** in the field pulldown and enter **1** in the Enter data field.
? Select the **Submit** checkbox
? Select the **Function key** radio button
? Select **ENTER** from the Function Key pulldown
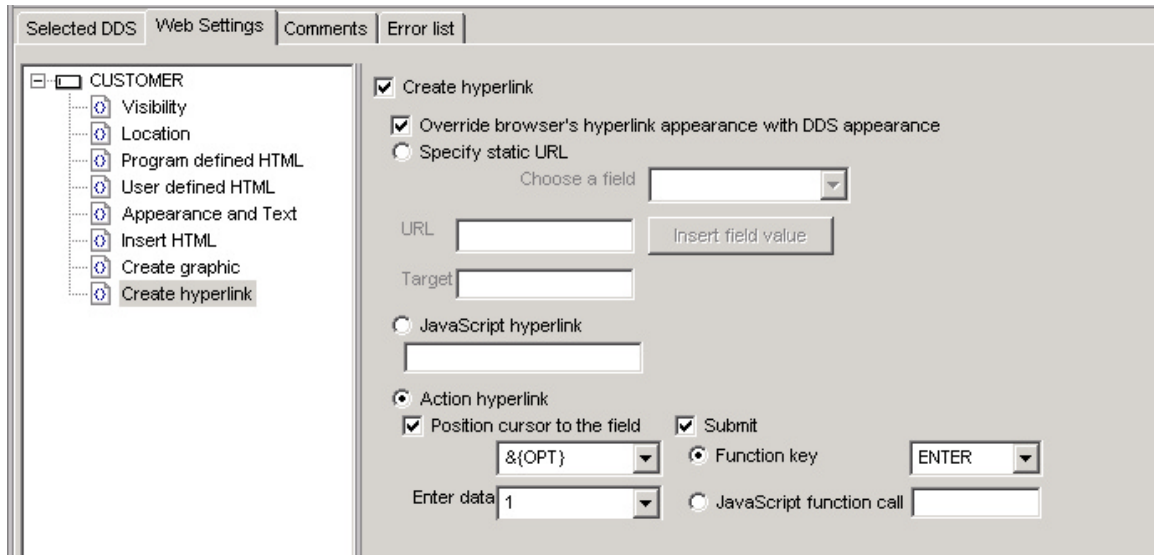
Just to recap, you have specified the following:

During the IBM WebFacing Tool conversion:

? The **customer name** fields in the subfile will be generated so they appear as links in the browser window

At runtime:

? When the **link** is clicked a **1** will be placed in the **option** field
? Also a **submit** request will be initiated to generate the equivalent of an **ENTER** key press.

Now that you have created the link for the **customer** field, you have to get rid of the **Option** field so it is not visible anymore.

__ 3. **Hiding the Option column**

On the design page, you now need to select the Option field to indicate that you want to work with it.

? Click on the option field(column) on the first record in the subfile to select it

Then on the Web Settings notebook page:

? Click on the **Visibility** choice in the list box
? Click on the **Hide field** radio button
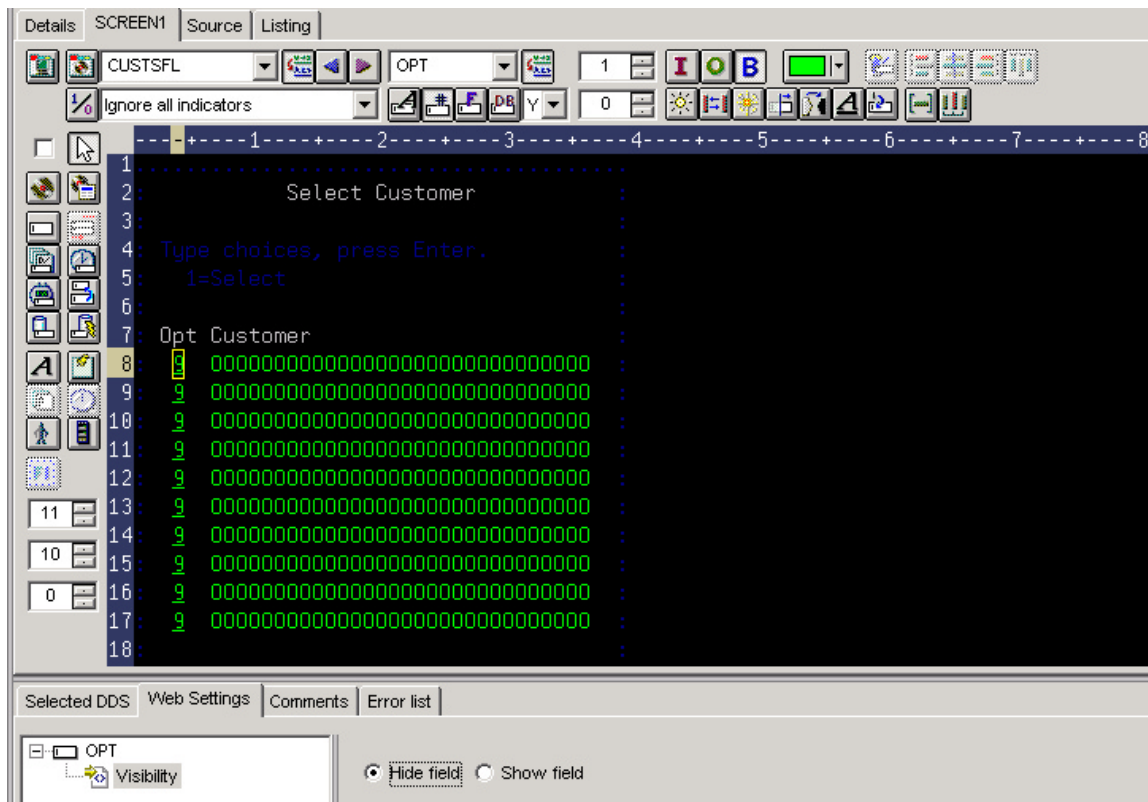
Now this column in the subfile will be hidden.

__ 4. **Hiding the Option heading**

Now you need to hide the heading for the option field as well. In order to do this you will have to put focus to a different record format in the design screen. CODE Designer shows all record formats belonging to a screen; this is called a group of record formats. You can see all record formats but you can only work with one record format at a time, the one that has focus.
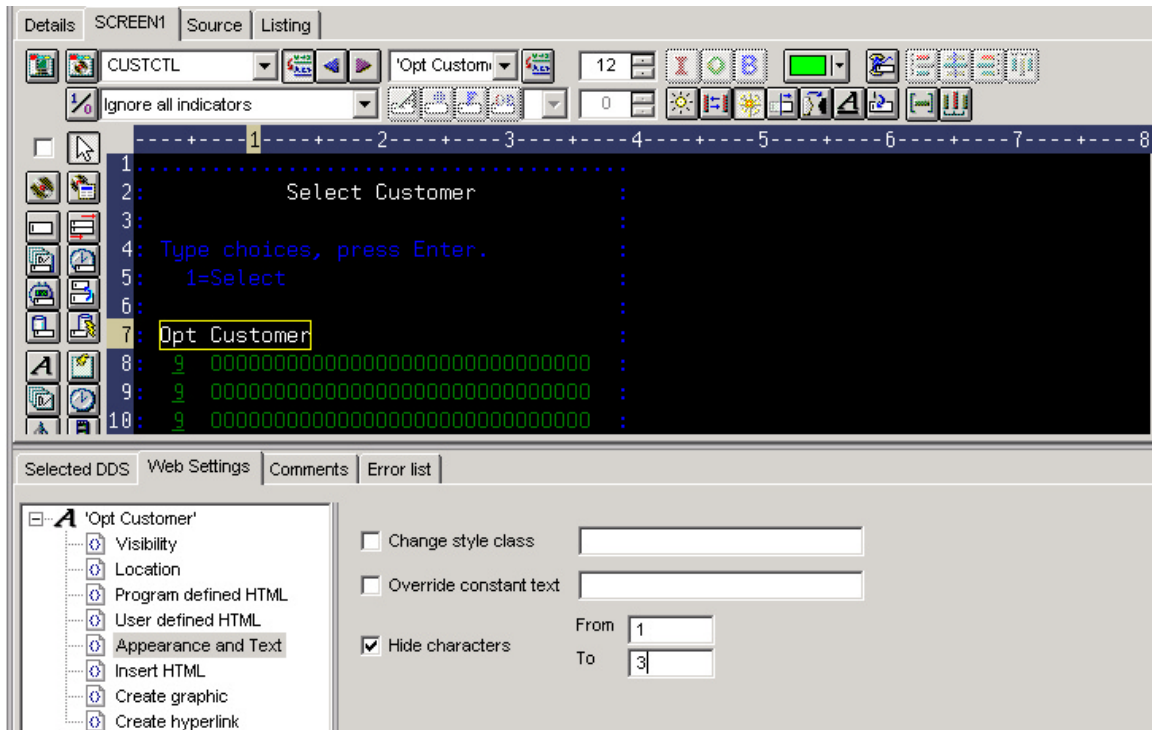
To shift focus to another record format:

? Click on the **arrow** on top of the design page, as shown in the **picture below**.
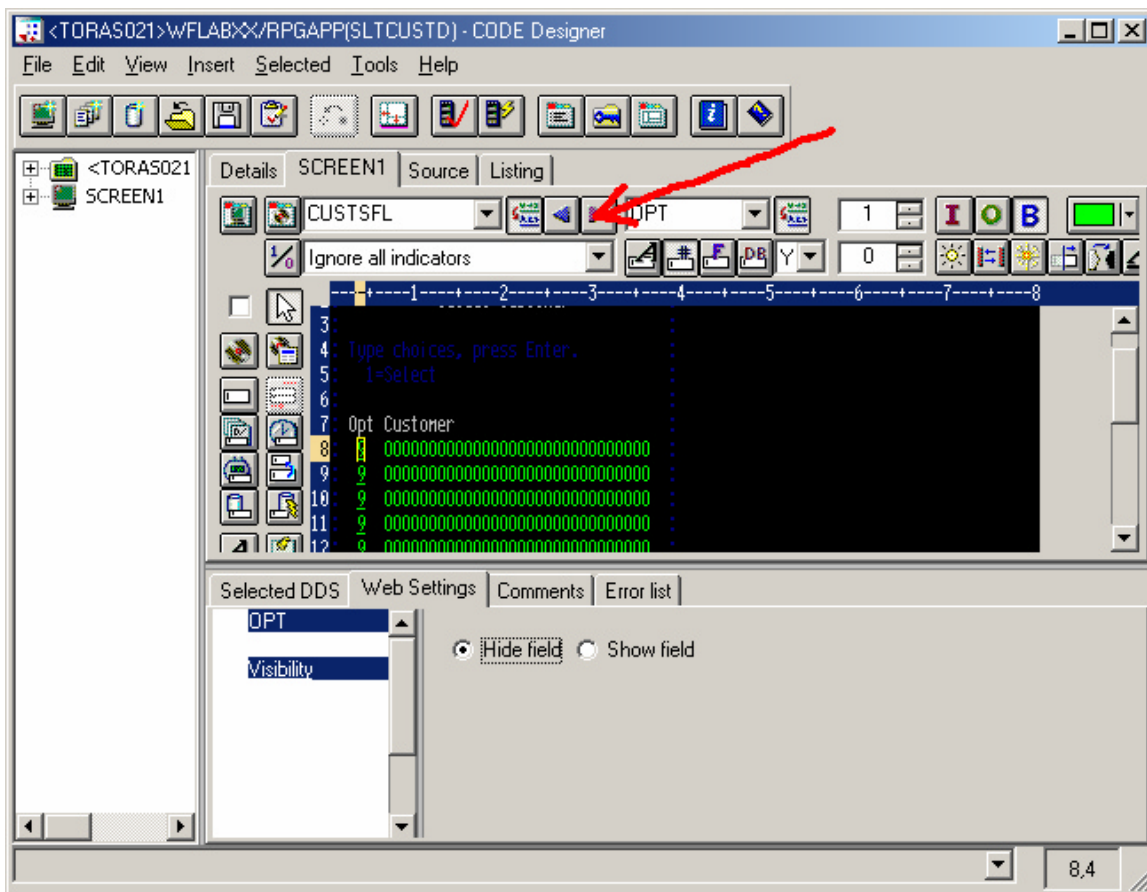
You will notice that the **top portion** of the design window is **now highlighted;** the bottom one only has half intensity. The highlighted portion is the one you can work with.

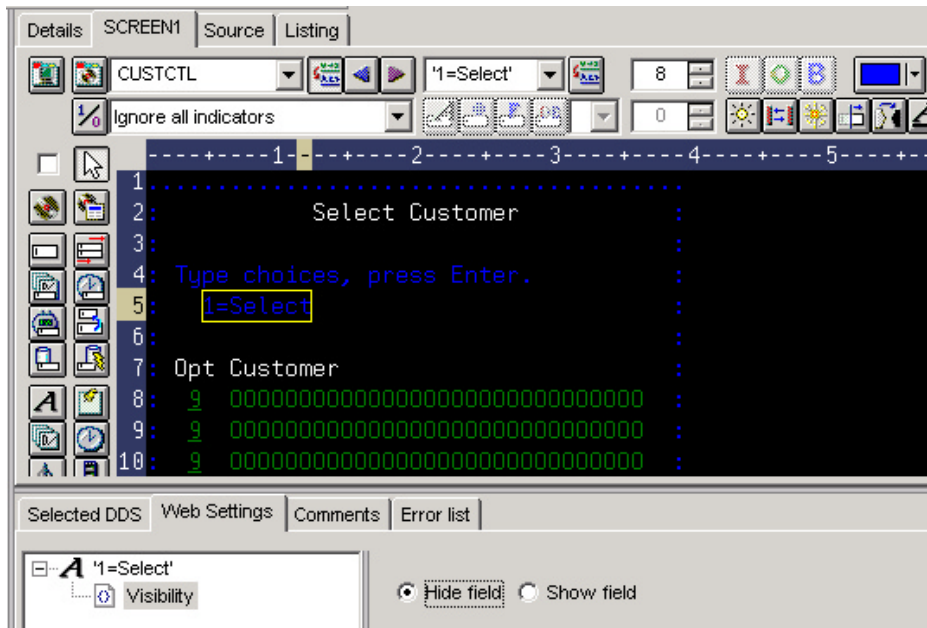?   Select the ***OPT Customer*** constant on the design page

?   Select ***Appearance and Text*** from the list box on the WebSettings page
?   Select the **Hide characters** check box
?   Specify **1** in the ***From*** entry field
?   Specify **3** in the ***To*** entry field

Now, you need to hide the **instructions** on the panel that guide the user to put a **1** into the option field to select a specific customer.

__ 5. **Hiding the *Select* instruction**

?   Select the constant *1=Select* in the 5250 design panel
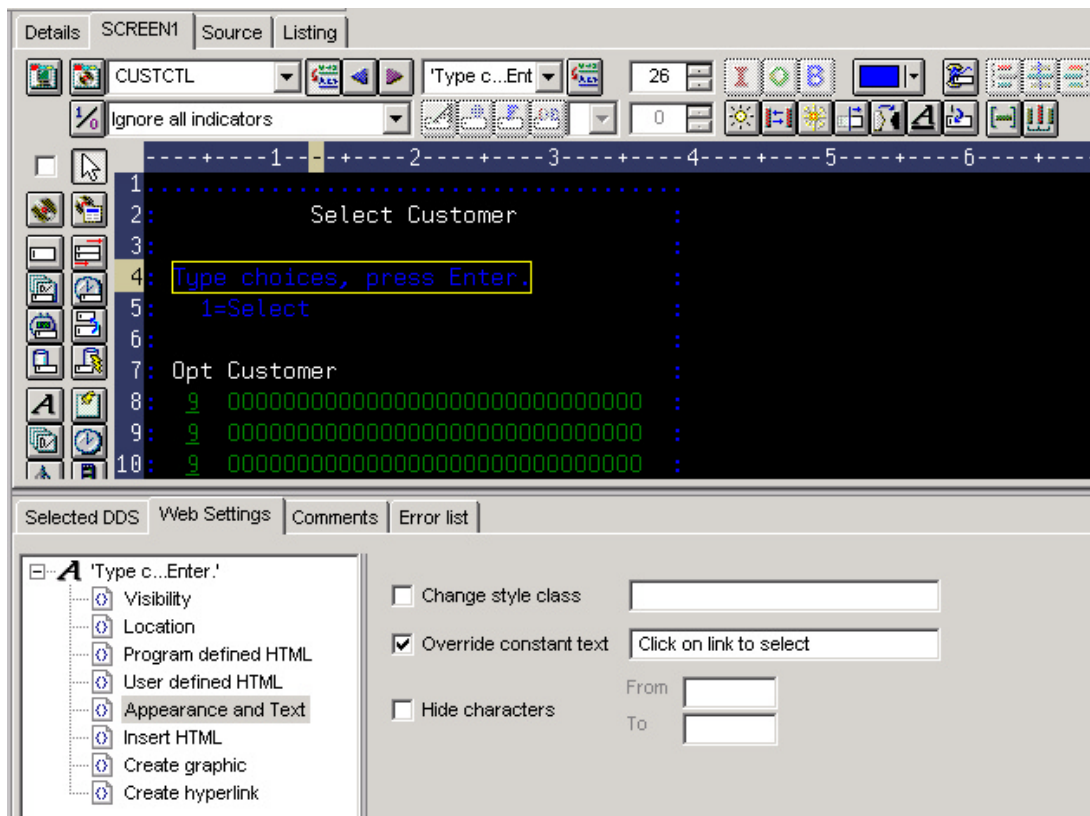
On the Web Settings page:

?   Select **Visibility** from the list box
?   Select the radio button **Hide field**

You also want to change the instruction text: ***Type choices press Enter***

__ 6. **Change instruction (Type choice press Enter)**

? Select the constant (***Type choices press Enter***) on the design page

Then on the Web Setting Notebook page:

? Select ***Appearance and Text*** from the list box on the Web Settings page
? Select the check box ***Override constant text*** and key into the entry field to the right of the check box this new text: ***Click on link to select***

Now all Web Settings are in place and you can go ahead and save the DDS source and reconvert this DDS member.

__ 7. **Closing CODE Designer and re-convert DDS member**

? Click on the **X** button (top right corner) of the CODE Designer dialog
? Specify **Yes** to save, when asked to do so.

You are done with CODE Designer.

? Go back to the WebSphere Development Studio Client workbench and the
WebFacing perspective.
? Select your project wflabxx in the WebFacing view
? Expand the project **+** if you can't see the DDS folder as part of the project
? Select the member SLTCUSTD you just changed
? Right mouse click on the members icon
? Select Convert from the popup menu

Only this member will be converted.

A conversion report will show up after the conversion is finished.

Now **test** the new file.

**Using the WebSphere Application Server — Express V5.0 test environment to show
the changes**

Right mouse click on the **wflabxx project** icon.

Select *Run on server* from the pop-up menu.

A pop-up window will ask for you to choose which server you would like to run on.
Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK.**
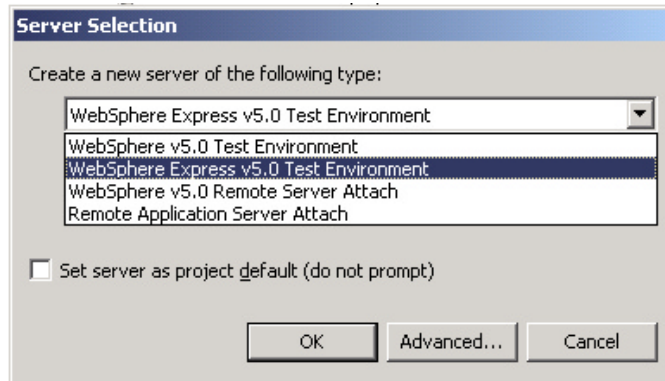
Use the WebSphere Application Server test environment to display the changes

Switch back to the WebFacing Projects View.

Right mouse click on the **wflabxx project** icon.

In your browser pane, click on the top **Order Entry Application** link and sign in with your iSeries user name and password when prompted.
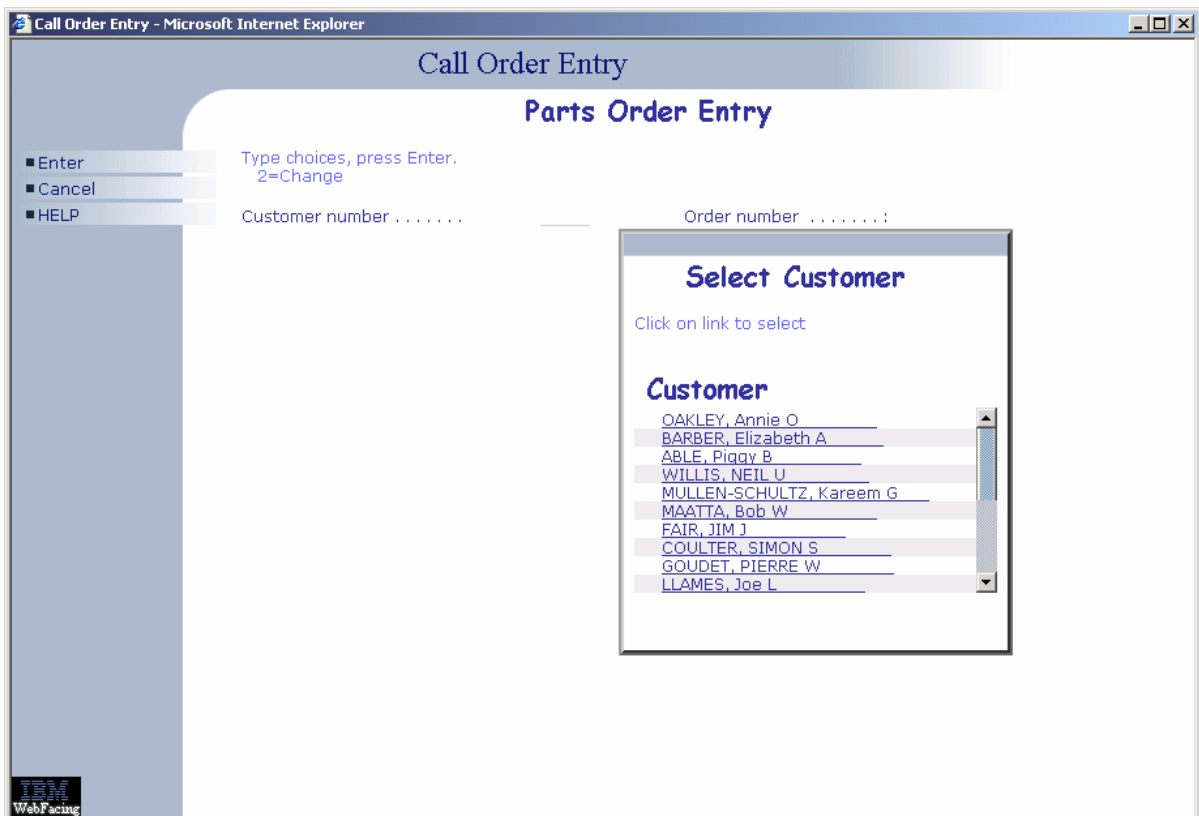
Changing Button Sizes

Changing the Pagebuilder.jsp page using Page Designer

During this exercise, you will use the Web tools in the WebSphere Development Studio Client workbench to update the Pagebuilder.jsp file the WebFacing tools has created inside the WebFacing project. You will use **Page Designer**, one of the web tools, to enhance the **Pagebuilder.jsp file** by modifying the default button sizes generated.

The IBM Webfacing Tool generates a default JavaServer Page file (PageBuilder.jsp) that is called by the server for every page that is displayed. Modifications made to this page provide a global change scope to an IBM Webfaced application.

The following tasks will be covered in this lab:

?   Switching to the navigator view
?   Locating the Pagebuilder.jsp file in the WebFacing project
?   Starting Page Designer and using it to enhance the **Pagebuilder.jsp**
?   Testing the changed page

As a result of this exercise, you will enhance the **Pagebuilder.jsp** page and testing the changed file.

What You Should be Able to Do

You will be able to locate the PageBuilder.jsp file in your IBM WebFacing Tool project.

You can use the **Page Designer tool** to enhance converted DDS source members and the **Pagebuildr.jsp** file:
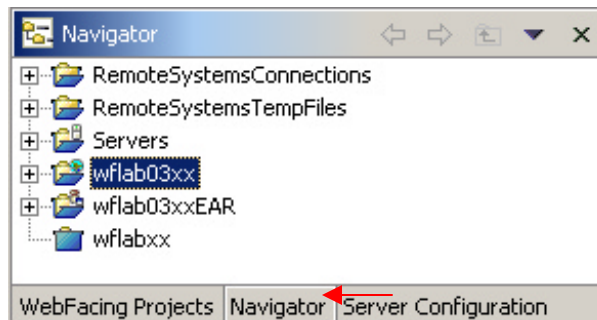
?   Use the navigator view to identify objects created by the IBM WebFacing Tool
?   Start the Page Designer tool.
?   Use **Page Designer components** to create a more attractive browser interface

__ 1. **Switching to the navigator view**

If you are not in the WebSphere Development Studio Client workbench:

? Start it as you did in the exercises before.
? Start the WebFacing perspective

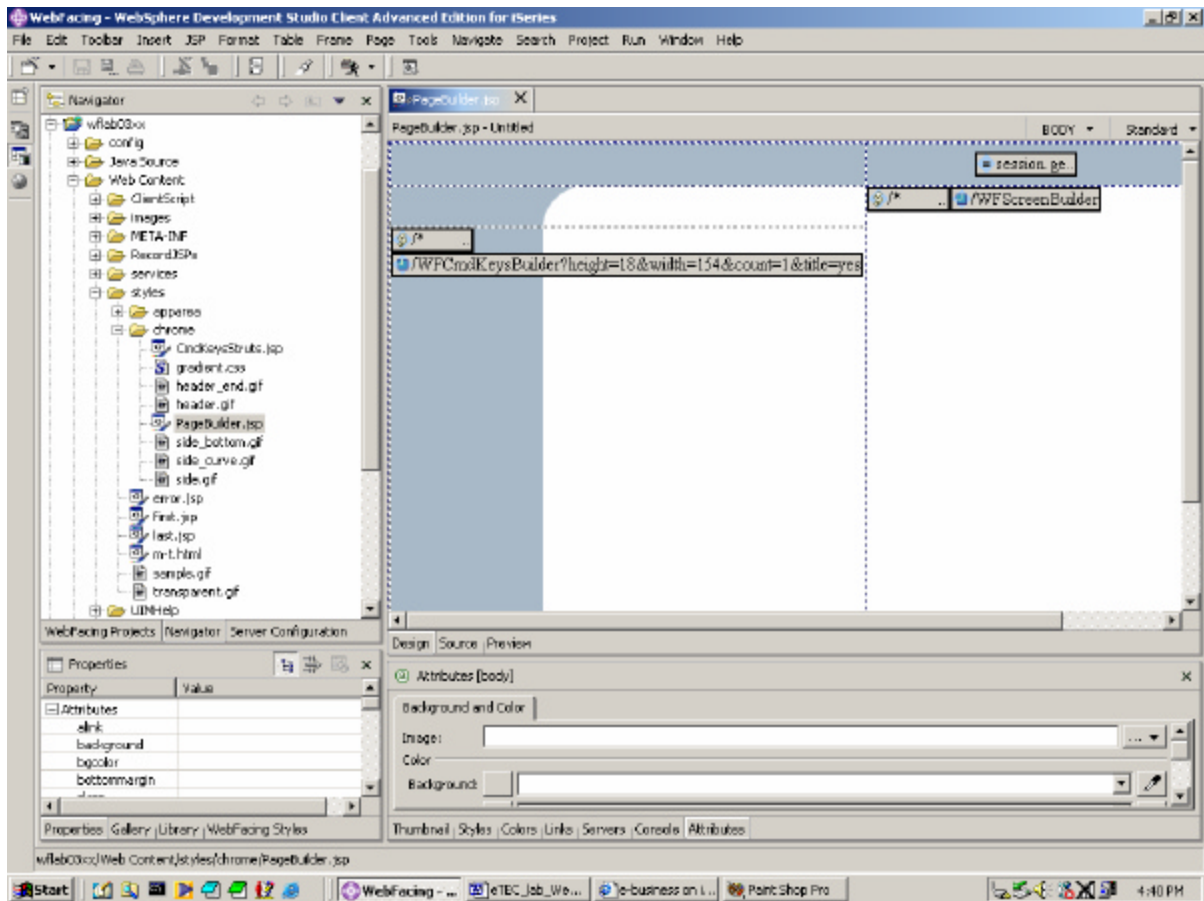Switch to the Navigator page by selecting the Navigator tab:

__ 2. **Navigator view**

You now have a view that shows you all the files in your WebFacing project. You will use this view to locate the **PageBuilder.jsp** file to work with it.

Expand the **wflabxx** project:

? Expand **Web Content** folder
? Expand the **styles** folder
? Expand the chrome folder
? Locate the **PagerBuilder.jsp** file in this folder

__ 3. **Using Page Designer**

To invoke **Page Designer,** do the following:

? **Double click** on the **File icon** of the **PageBuilder.jsp** file

The **Page Designer** window **will come up** on the **right side** of the workbench.

? This is the window you will be using to enhance the web page as shown above.
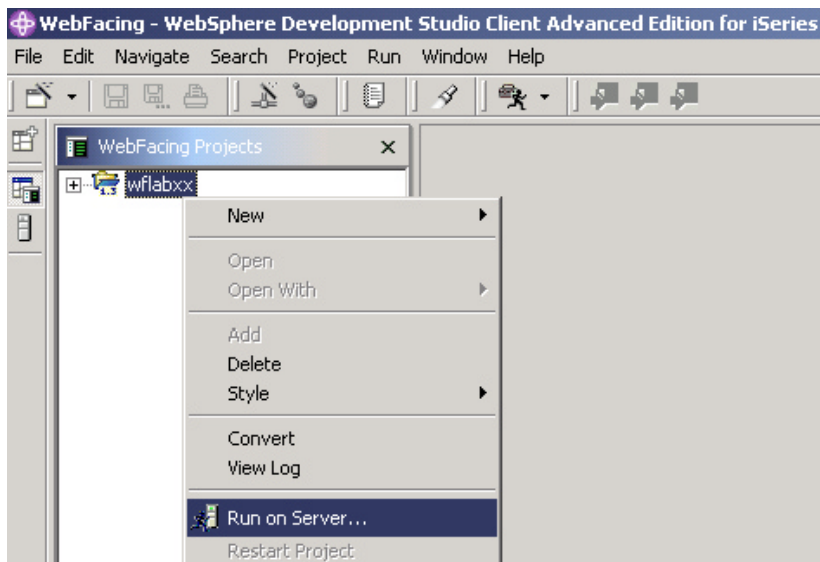
__ 4. **Change the Button Width**

In Page Designer, click the WFCmdKeysBuilder string. This will display the attributes for that field. Modify the width field from 154 to 100.
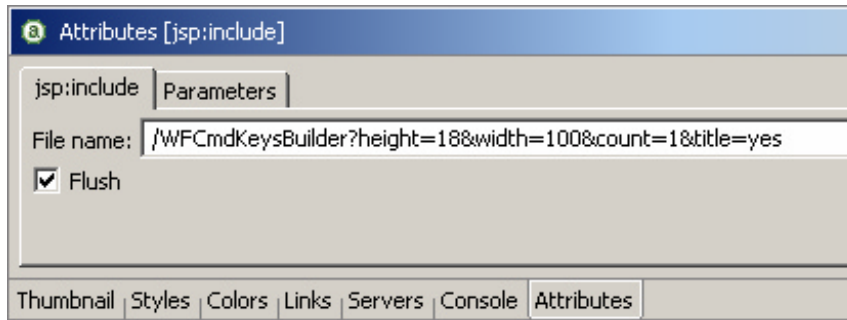
Save the changes by selecting **File —> Save PageBuilder.jsp**

__ 5. **Using the WebSphere Application Server — Express V5.0 test environment to show the changes**

? Right mouse click on the **wflabxx project** icon

? Select ***Run on server*** from the pop-up menu

A pop-up window will ask for you to choose which server you would like to run on. Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK.**
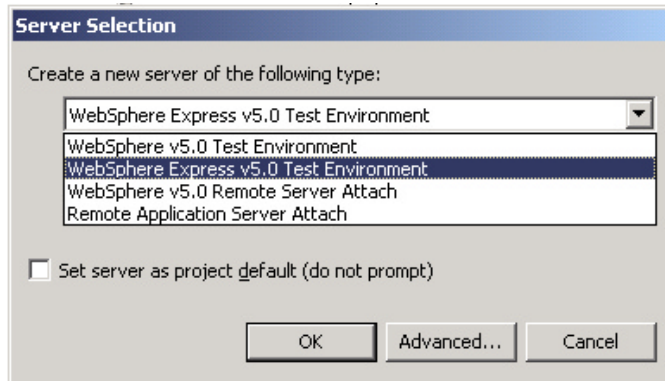
__ 6. **Use the WebSphere Application Server test environment to display the changes**

   ? In your browser pane, click on the top **Order Entry Application** link and sign in with your iSeries user name and password when prompted.
   ? Notice that the button width had decreased by the amount specified in **PageBuilder.jsp**
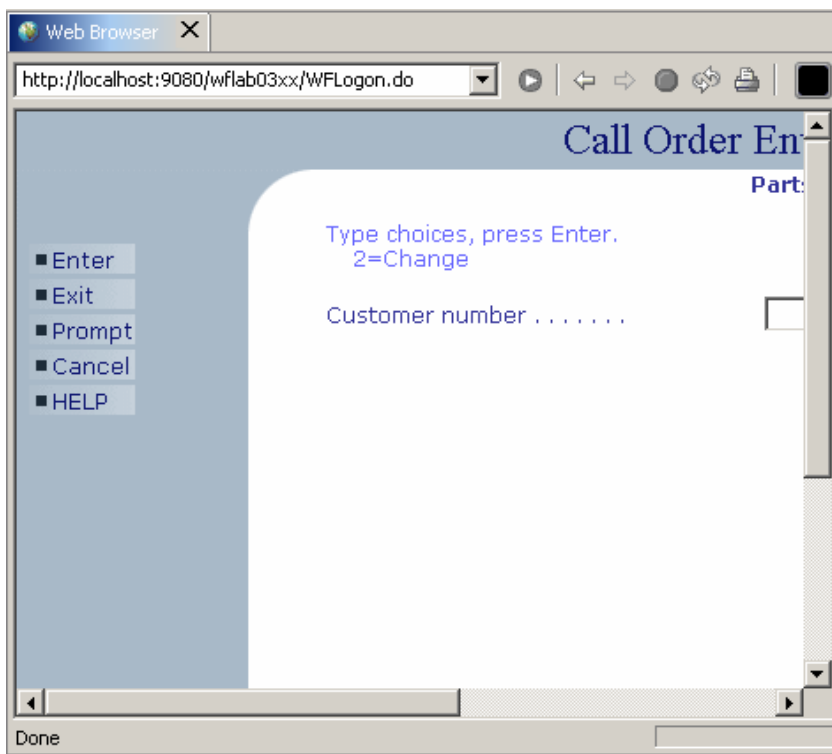
Changes to the Style sheet colors, widths etc. and be done to PageBuilder.jsp.

Changing the Default Image

Changing the PageBuilder.jsp page using Page Designer

During this exercise, you will use the Web tools in the WebSphere Development Studio Client workbench to update the Pagebuilder.jsp file the IBM WebFacing Tool has created inside the WebFacing project. You will use **Page Designer**, one of the web tools, to enhance the **Pagebuilder.jsp file** by modifying the default image with a custom image file.

The IBM Webfacing tool generates a default JavaServer Page file, (PageBuilder.jsp) that is called by the server for every page that is displayed. Modifications made to this page provide a global change scope to an IBM Webfaced application.

The following tasks will be covered in this lab:

?   Switching to the navigator view
?   Locating the Pagebuilder.jsp file in the WebFacing project
?   Starting Page Designer and using it to enhance the **Pagebuilder.jsp**
?   Testing the changed page

As a result of this exercise, you will enhance the Pagebuilder.jsp page and testing the changed file.

What You Should be Able to Do

You will be able to locate the Pagebuilder.jsp file in your WebFacing project.

You can use the **Page Designer tool** to enhance converted DDS source members and the **Pagebuilder.jsp** file:

?   Use the navigator view to identify objects created by the IBM WebFacing Tool
?   Start the Page Designer tool.
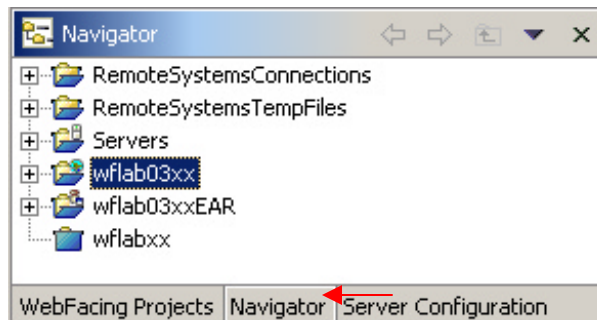?   Use **Page Designer components** to create a more attractive browser interface

__ 1. **Switching to the navigator view**

If you are not in the WebSphere Development Studio Client workbench:

? Start it as you did in the exercises before.
? Start the WebFacing perspective

Switch to the Navigator page by selecting the Navigator tab:

__ 2. **Navigator view**

You now have a view that shows you all the files in your IBM WebFacing Tool project. You will use this view to locate the **PageBuilder.jsp** file to work with it.

Expand the **wflabxx** project:

? Expand **Web Content** folder
? Expand the **styles** folder
? Expand the chrome folder
? Locate the **PagerBuilder.jsp** file in this folder
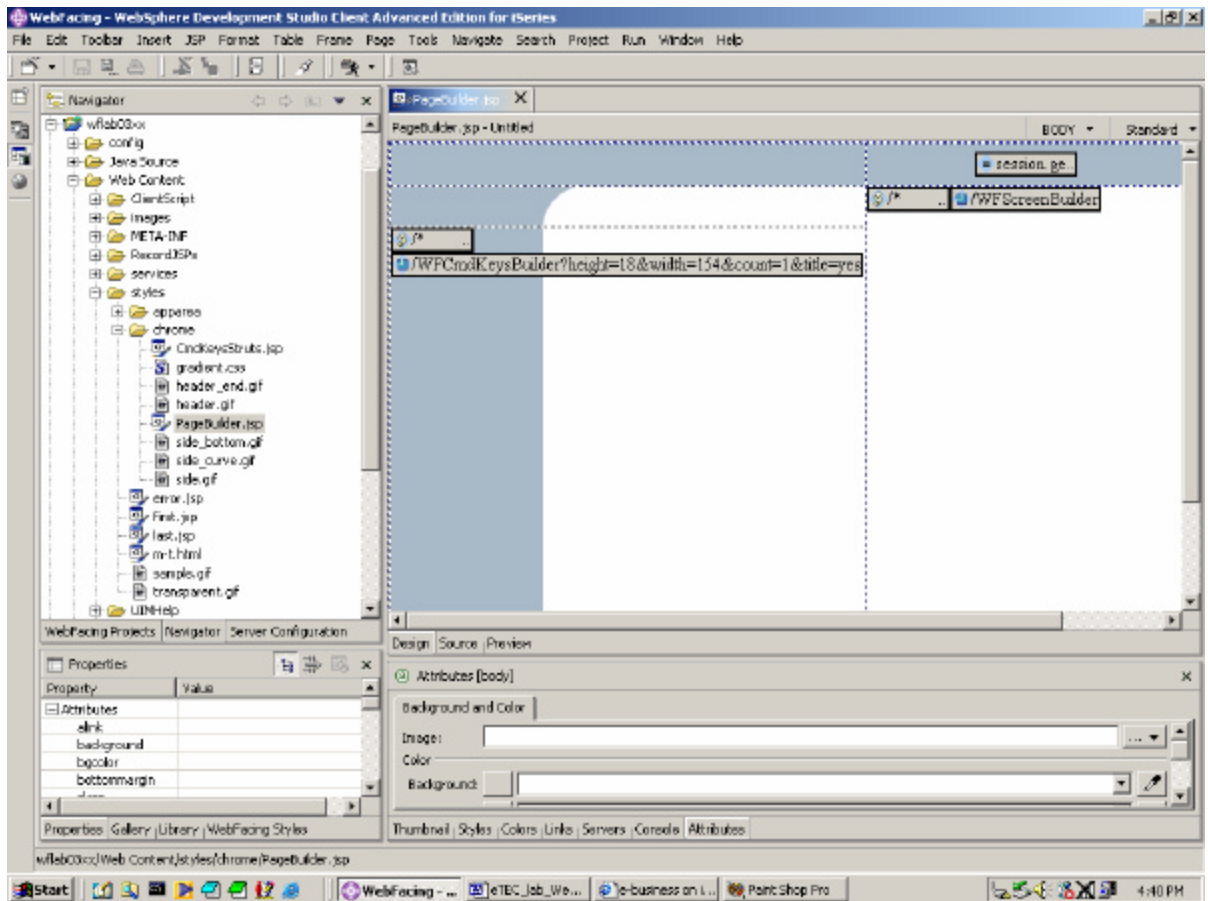
__ 3. **Using Page Designer**

To invoke **Page Designer,** do the following:

? **Double click** on the **File icon** of the **PageBuilder.jsp** file

The **Page Designer** window **will come up** on the **right side** of the workbench.

? This is the window you will be using to enhance the web page as shown above.

__ 4. **Change the Default Image**

The IBM WebFacing Tool automatically inserts an image in the PageBuilder.jsp file.

The insertion point varies depending on the original style sheet selected.

? **Double click** on the **File icon** of the **PageBuilder.jsp** file

The **Page Designer** window will come up on the **right side** of the workbench.

This is the window you will be using to enhance the Web page as shown above**.**

? Locate the default image within **PageBuilder.jsp**
? The Image will have a red X though it. This is due the relative addressing of the image. This is expected and required if the image is to be displayed properly when deployed to the application Server.
? Right click on the image and select **Attributes**
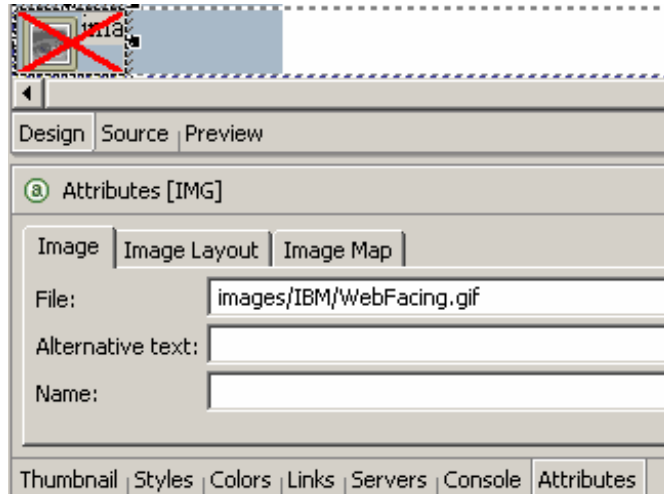
? The default image is located in the images/IBM directory of your project and is called WebFacing.gif. The default image looks like this:
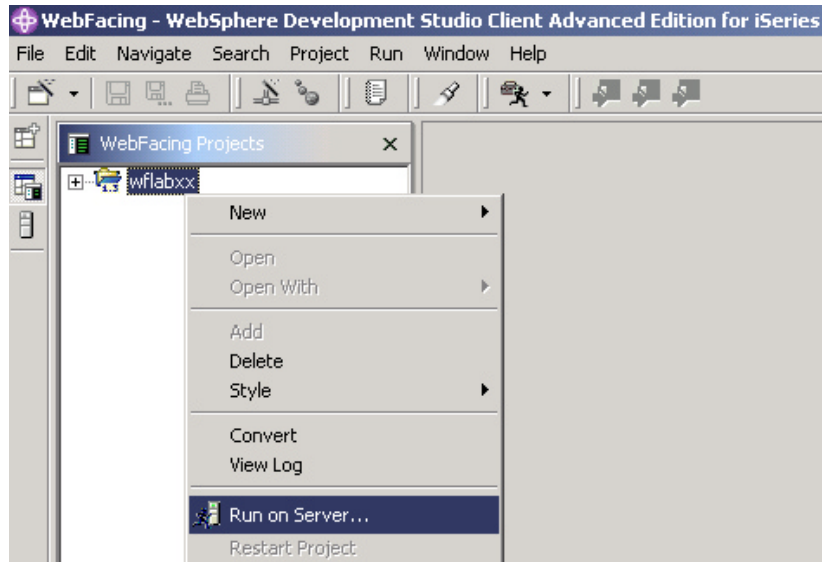

? Change the name used to images/IBM/**WebFacing2.gif** This image looks like this:

? Save the changes

__ 5. **Using the WebSphere Application Server — Express V5.0 test environment to show the changes**

? Right mouse click on the **wflabxx project** icon

? Select *Run on server* from the pop-up menu

A pop-up window will ask for you to choose which server you would like to run on. Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK.**
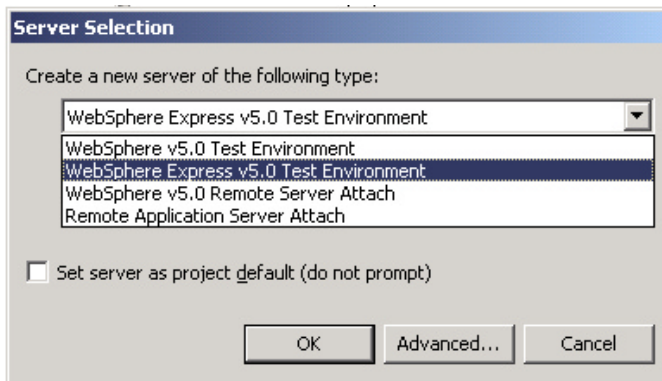
__ 7. **Use the WebSphere Application Server test environment to display the changes**

? In your browser pane click on the top **Order Entry Application** link and sign in with your iSeries user name and password when prompted.
? Notice that the Image has changed.

Custom Images can be inserted anywhere within the PageBuilder.jsp file in a similar manner.

Adding ToolTips

HTML provides a title attribute which may be rendered by browsers to display the title as a "tool tip" (a short message that appears when the pointing device pauses over an object such as a field). This enhancement is easily added to an IBM WebFacing Tool application.

The following tasks will be covered in this lab:

? Specifying the DDS source member to work with
? Starting CODE Designer
? Working with Web Settings in CODE Designer
? Reconverting the application

As a result of this exercise, you will be able to enhance your WebFaced user interface for the browser environment.

What You Should be Able to Do

As a result of this exercise you will be able to change the DDS source and add a "Tool Tip" to an Entry Field.

? Use CODE Designer to access DDS source
? Use Web Settings to add web user interface changes
? Reconvert the changed DDS

Using CODE Designer to access DDS display file source

During this exercise you will use **CODE Designer** to add some **Web Settings** to the DDS source. We want you to improve the web **user interface** for the customer list window.

In this window, currently users have to enter a valid customer ID. Users may not know that pressing F4 brings up a list of valid customers.

? You will enhance this application by adding a "Tool Tip" when the mouse cursor is hovered over the customer entry field.

__ 1. Use **Page Designer components** to create a more attractive browser interface. Start the **WebSphere Development Studio Client workbench**, if it is not up and running

? In the workbench, select the *WebFacing* perspective
? Make sure you are on the **project** page and not the **navigator** notebook page

? Expand **your project** in the tree view by clicking on the **+**
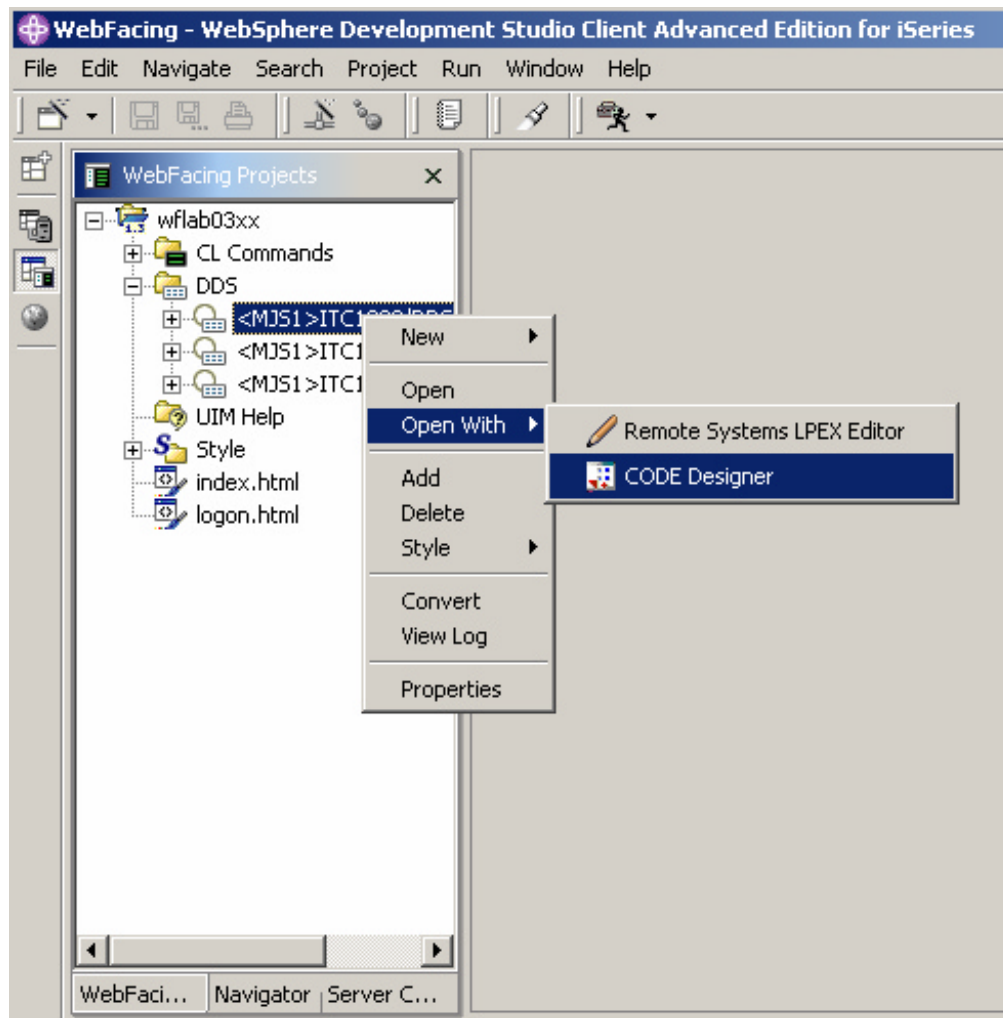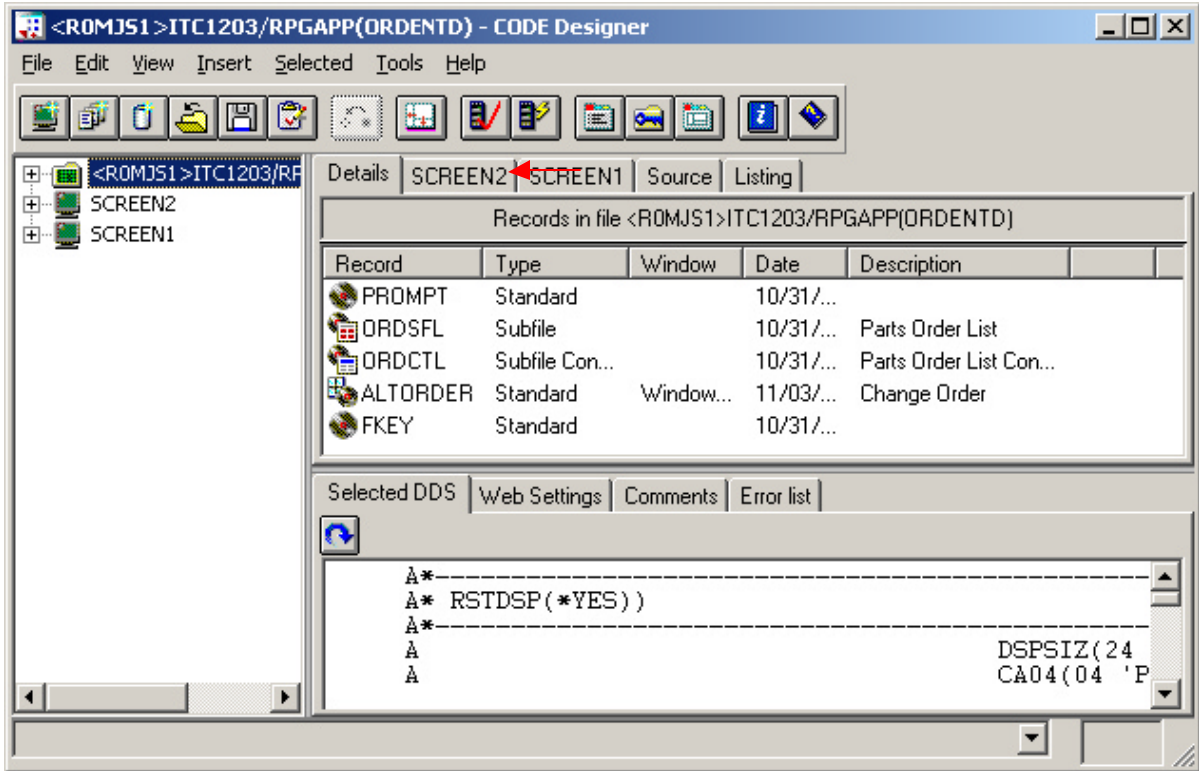
__ 2.   **Modifying DDS Member Through CODE Designer**

? Expand the **DDS folder**
? Right mouse click on the **ORDENTD** member

Start the CODE Designer by:

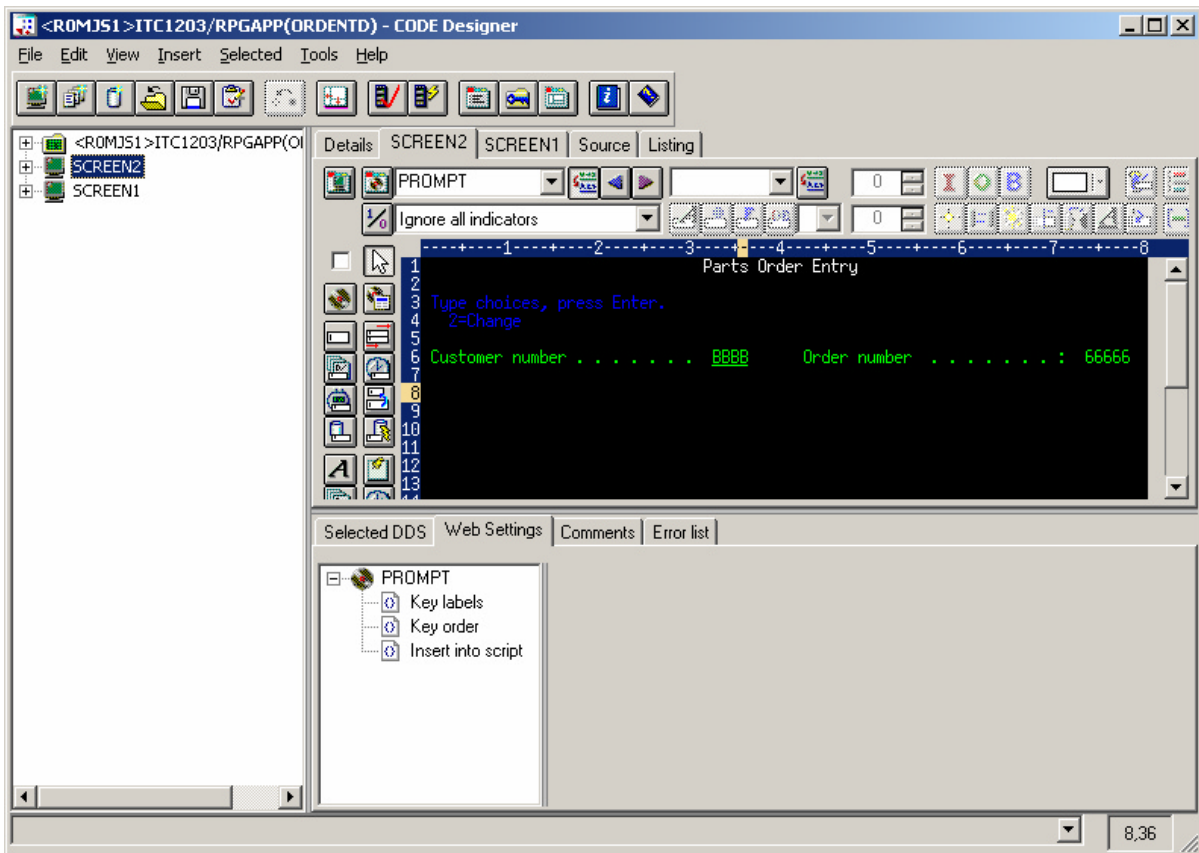? Selecting **Open With —>CODE Designer** from the pop-up menu

CODE Designer is loading the member. This will take a moment.

Eventually, you will see the **DDS member** loaded in CODE Designer as shown below:

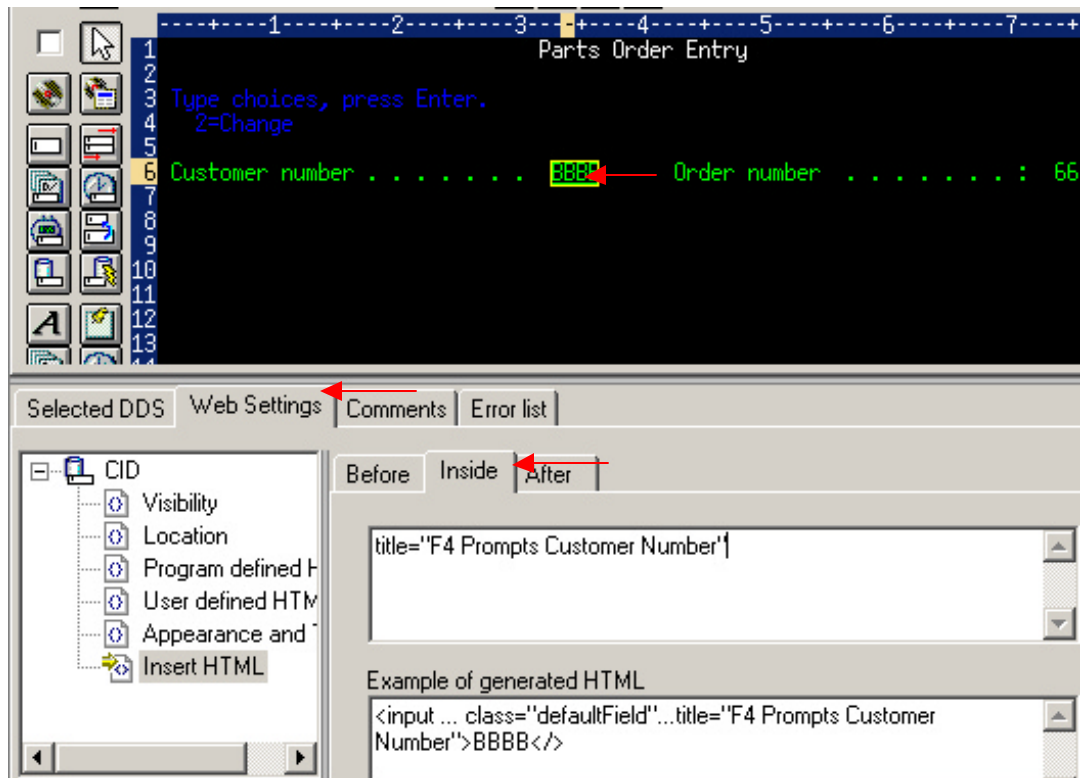Select the **SCREEN2** tab on the notebook.

You should see a dialog similar to the figure below.

__ 3. **Modifying DDS Member Through CODE Designer**

? Right click on the **Customer Number Entry** field
? Select the **Web Settings** tab
? Select **Insert HTML**
? Select the **Inside** tab
? Within the **Inside** tab type:
title="F4 Prompts for Customer Number"

? Save the changes
? Close CODE Designer

__ 4. If the **WebFacing perspective,** Select the project <u>you have been working</u> on in the previous exercise **wflabxx**

? Expand this project by **clicking** on the ✚ sign beside its icon in the tree view
? You should see an icon named **DDS** in the expanded tree

If you **do not** see a **DDS** folder:
You might be in the **Navigator** view,
? Check the pane title bar,

If it shows **Navigator**,
? Locate the **WebFacing projects** Tab at the **bottom** of the list pane
? Click on it.

Now the **WebFacing projects** view should be active and you should be **able** to locate the **DDS** folder**.**

__ 5. Expand the DDS folder by **clicking** on the ✚ sign (beside it)

You should see all **3 members** that you selected in the previous exercise.

Since you only made changes to one member, it is only necessary to convert that one member.

Right mouse **click** on the **ORDEBTD** member in the DDS folder
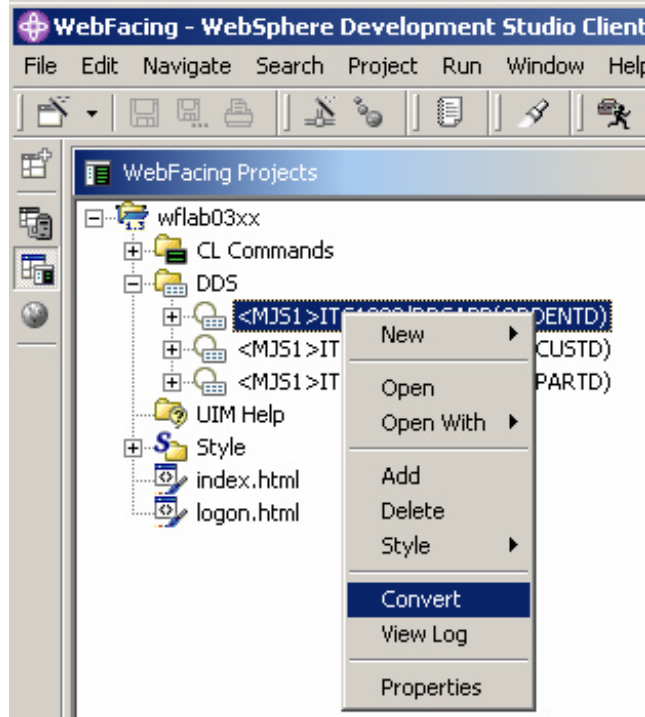
Select **Convert** from the pop-up menu

The conversion process starts.

(You **may** be prompted for a signon and password. Look for the screen and use your team id and password. If you do not see a prompt, it is OK, just continue.)

Wait until the conversion finishes

__ 6.   Using the WebSphere Application Server — Express V5.0 test environment to show the changes

? Right mouse click on the **wflabxx project** icon
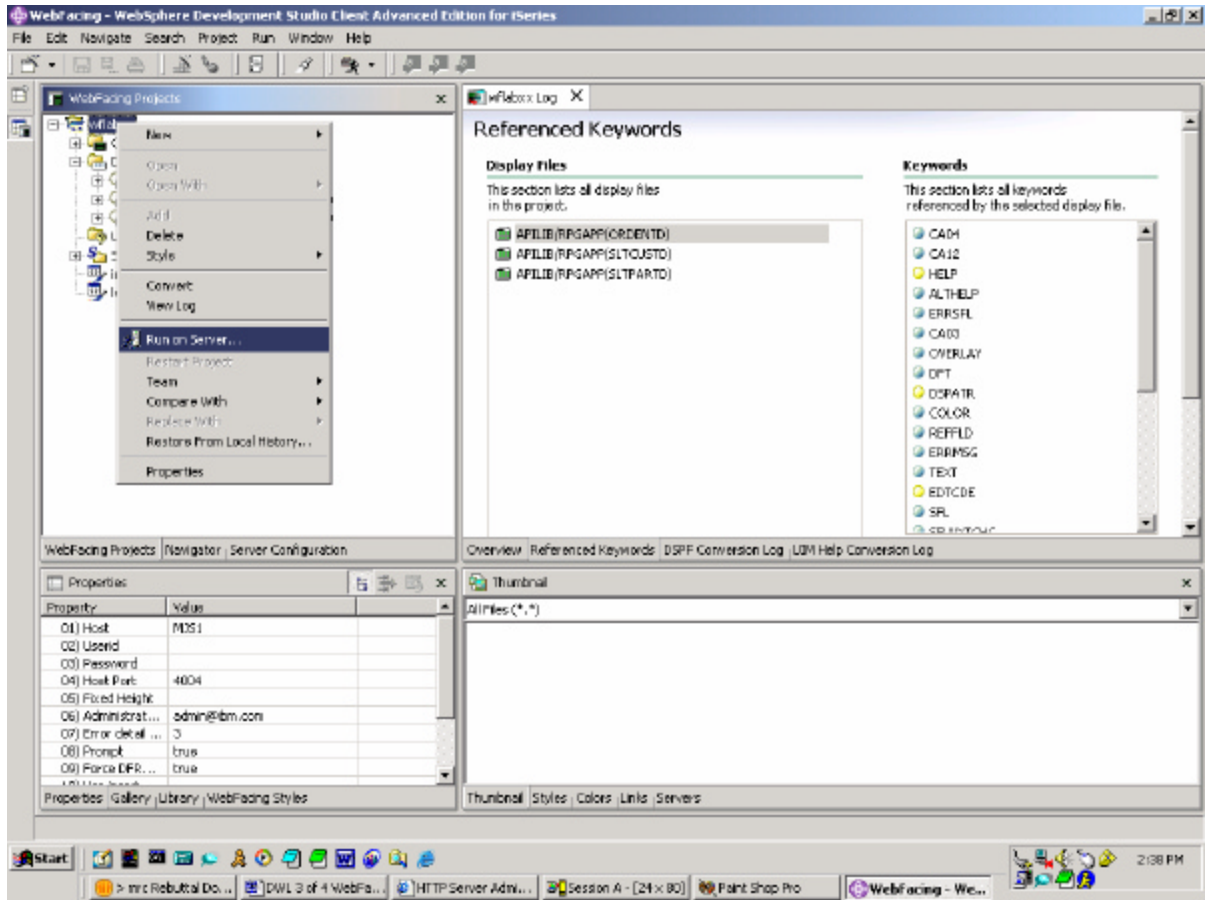
? Select ***Run on server*** from the pop-up menu

A pop-up window will ask for you to choose which server you would like to run on. Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK.**
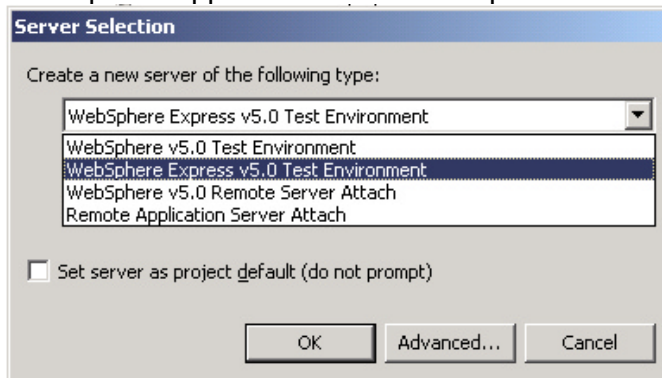
__ 4. **Use the WebSphere Application Server test environment to display the changes**

? In your browser pane, click on the top **Order Entry Application** link and sign in with your iSeries user name and password, when prompted.

? Position the Mouse Cursor over the Customer Number field. Notice how the "Tool Tip" is displayed.

Custom html can be added in a similar way to any field.
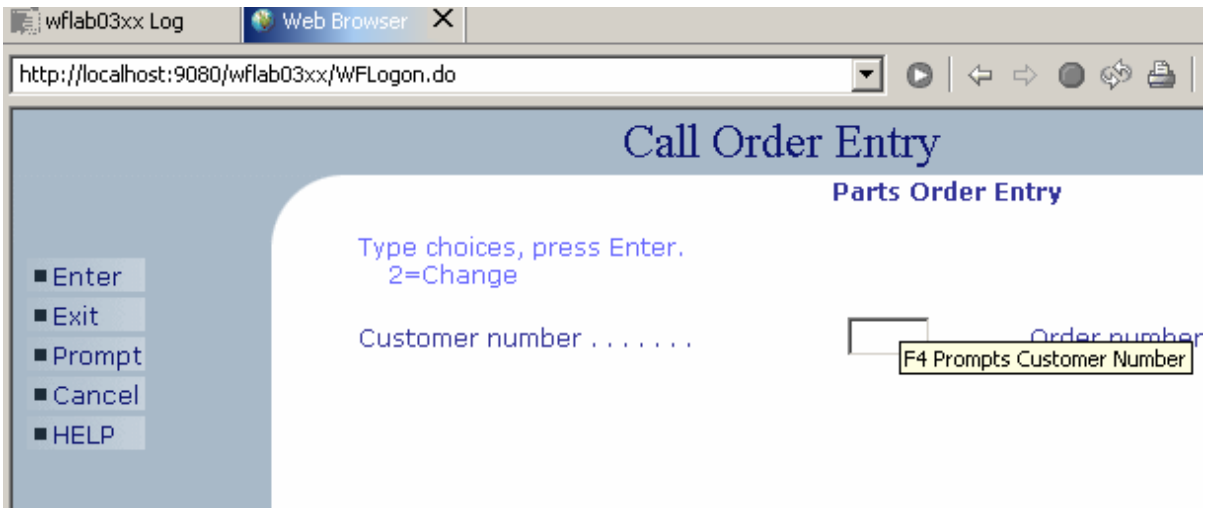
Using JavaScript to add a Clock

Changing the Pagebuilder.jsp page using Page Designer

During this exercise, you will use the Web tools in the WebSphere Development Studio Client workbench to add a clock to the status bar of the browser window of the IBM Webfaced application.

All JavaScript in the Client Script\user folder is executed at page load time. This makes it very easy to add JavaScript to an IBM Webfacing application. For this example, we will add a Clock.js to the \ClientScript\user folder of the project. Clock.js will display the current date and time in the status bar of the browser

The following tasks will be covered in this lab:

?   Switching to the navigator view
?   Locating the ClientScript folder in the IBM WebFacing Tool project
?   Adding JavaScript to the application
?   Testing the changed page

As a result of this exercise, you will enhance the IBM Webfaced application.

What You Should be Able to Do

You will be able to locate the ClientScript folder in your IBM WebFacing Tool project.
?   Use the navigator view to identify objects created by the IBM WebFacing Tool
?   Use a Wizard to insert new JavaScript file
?   Use **Page Designer components** to create a more attractive browser interface

__ 1. Switching to the navigator view

If you are not in the WebSphere Development Studio Client workbench:

? Start it as you did in the exercises before.
? Start the WebFacing perspective

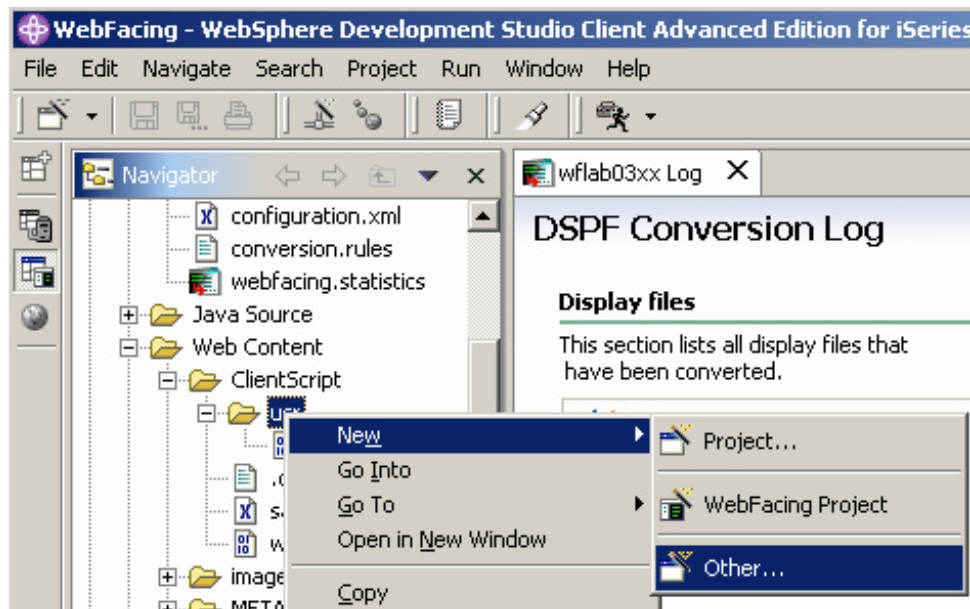Switch to the Navigator page by selecting the Navigator tab
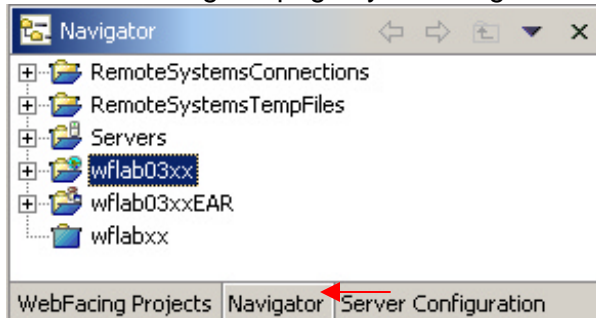
__ 2. Navigator view

You now have a view that shows all the files in your WebFacing project. You will use this view to locate the ClientScript.
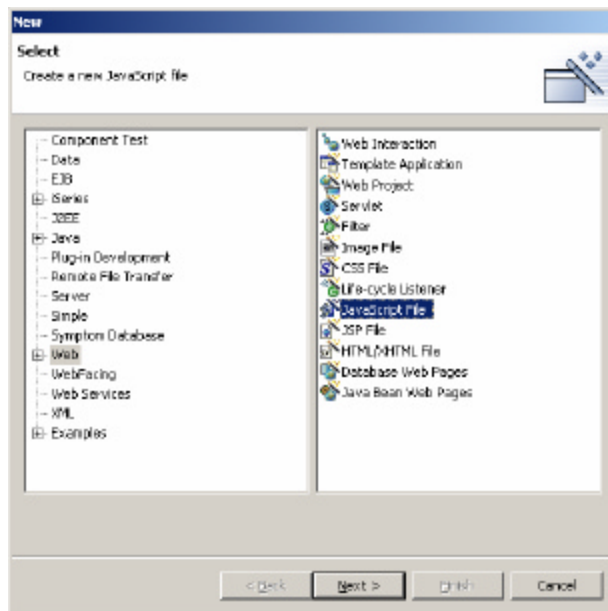
Expand the **wflabxx** project:

? Expand **Web Content** folder
? Expand the **ClientScript** folder
? Expand the **user** folder

__ 3. **Add JavaScript file to user directory**

? Right click the WebContent/ClientScript/user directory.
? From the Popup menu, select New ✍ Other
? From the Dialog Box, select Web ✍ JavaScript File
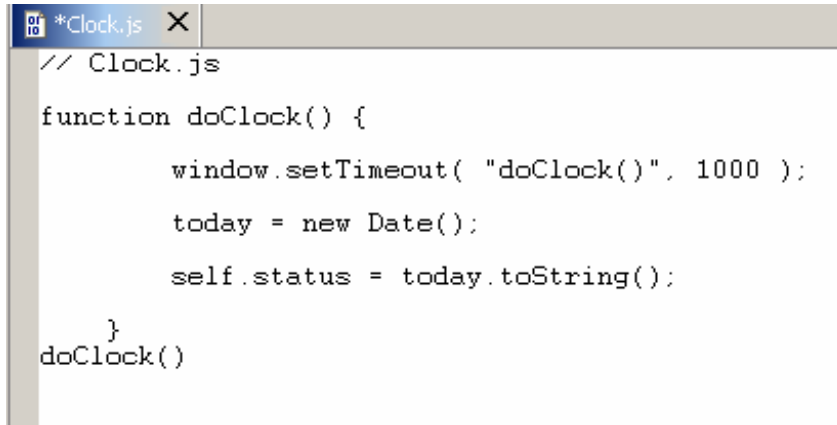
? Click Next
? For the Filename enter **Clock**
? Click Finish
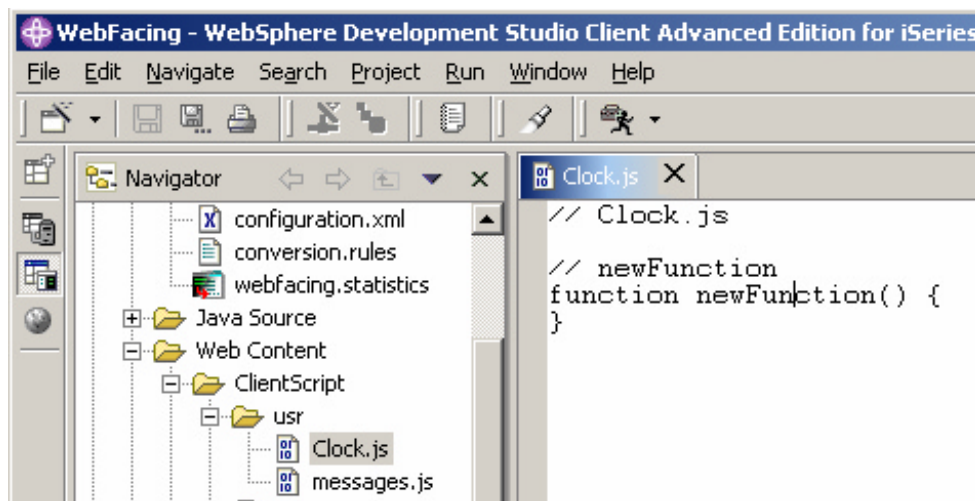
__ 4. **Modify JavaScript File for desired functionality**

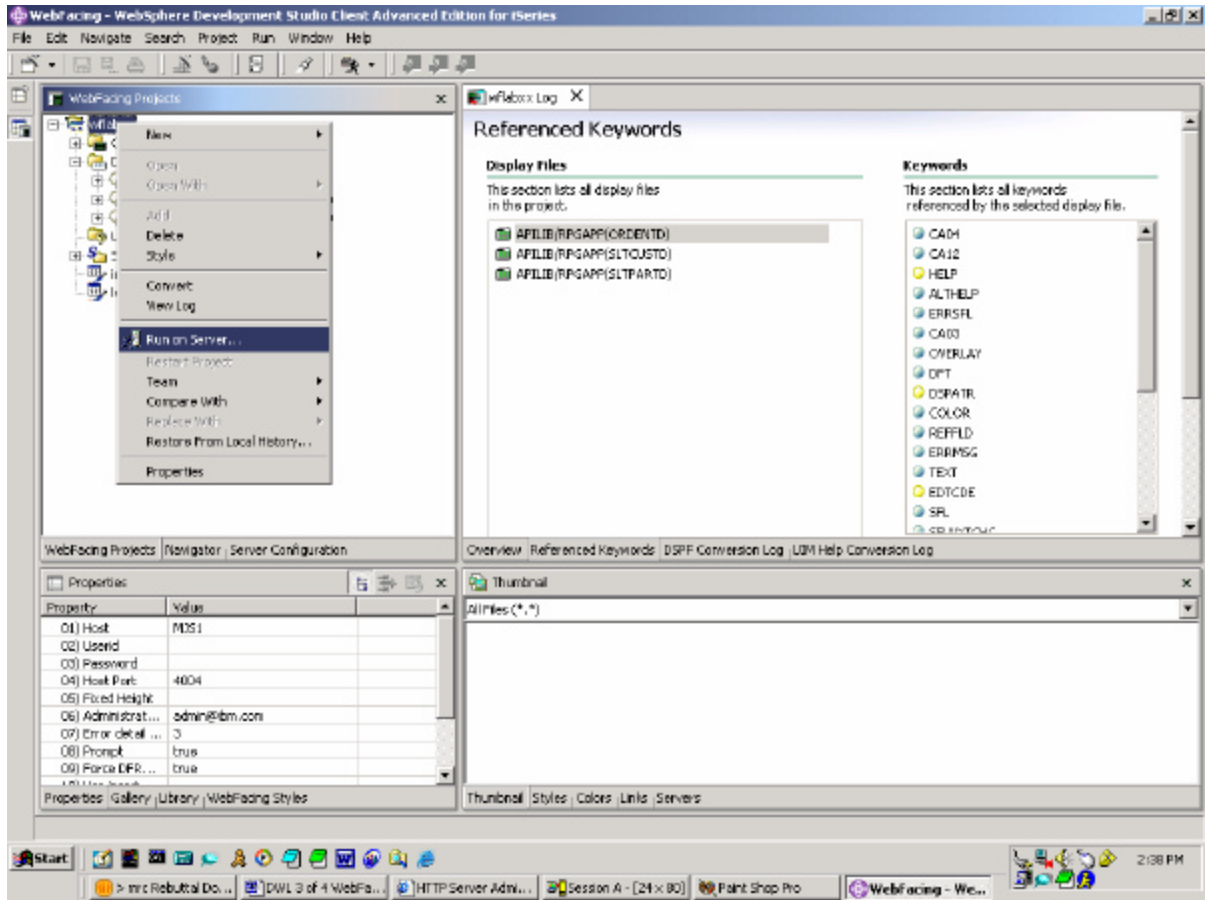?   Change the Clock.js file source code **EXACTLY** as shown below:

```
// Clock.js

function doClock() {

        window.setTimeout( "doClock()", 1000 );

        today = new Date();

        self.status = today.toString();

    }
doClock()
```

?   Be sure your code matches exactly or the clock will get runtime errors
?   Save the Changes

__ 5. **Using the WebSphere Application Server — Express V5.0 test environment to show the changes**

? Right mouse click on the **wflabxx project** icon

? Select *Run on server* from the pop-up menu

A pop-up window will ask for you to choose which server you would like to run on. Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK.**
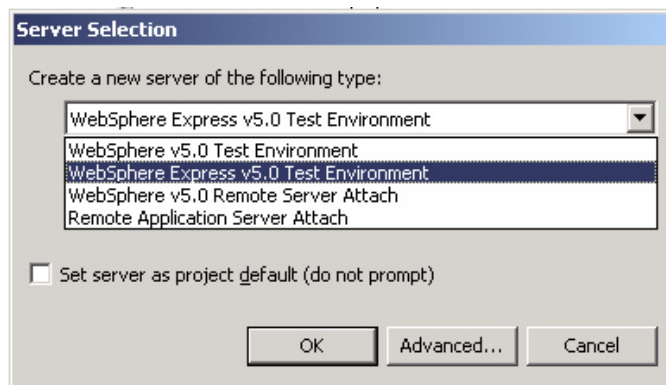
__ 6. **Use the WebSphere Application Server test environment to display the changes**

? In your browser pane, click on the top **Order Entry Application** link and sign in with your iSeries user name and password when prompted.

? Notice that in the status bar of the browser window, the clock is displayed and is updated every second.
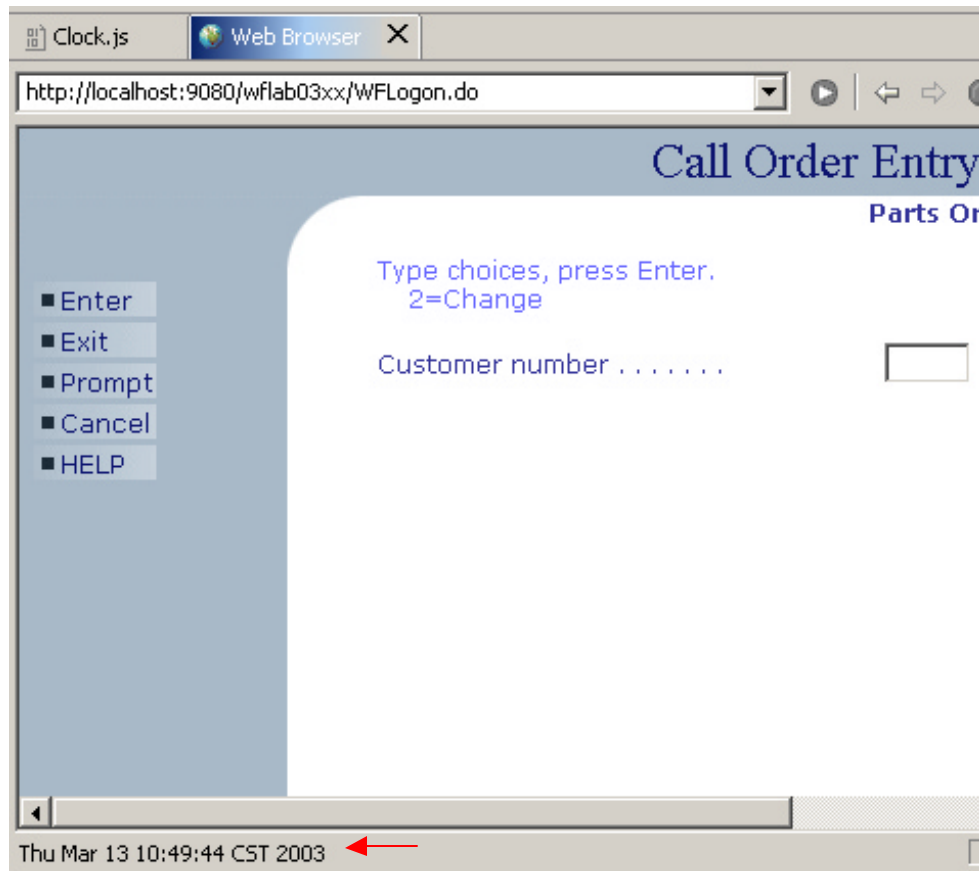
? Other JavaScript functionality can be added in a similar manner.

Change the initial page with Web tools

Changing the index.html page using Page Designer

During this exercise, you will use the Web tools in the WebSphere Development Studio Client workbench to update the index.html file the WebFacing tools has created inside the WebFacing project. You will use Page Designer, one of the web tools, to enhance the index.html page.

The following tasks will be covered in this lab:

? Opening the WebFacing Perspective and selecting the WebFacing Projects view.
? Locating the index.html file in the WebFacing project
? Starting Page Designer and using it to enhance the **index.html** web page
? Testing the changed page

As a result of this exercise, you will enhance the **index.html** page and testing the changed file.

What You Should be Able to Do

You will be able to locate the index.html page in your WebFacing project.

You can use the **Page Designer tool** to enhance converted DDS source members and the **index.html** page:

? Use the WebFacing projects view to identify objects created by the WebFacing tool
? Start the Page Designer tool.
? Use **Page Designer components** to create a more attractive browser interface

__ 1. **Switching to the WebFacing view**

If you are not in the WebSphere Development Studio Client workbench:
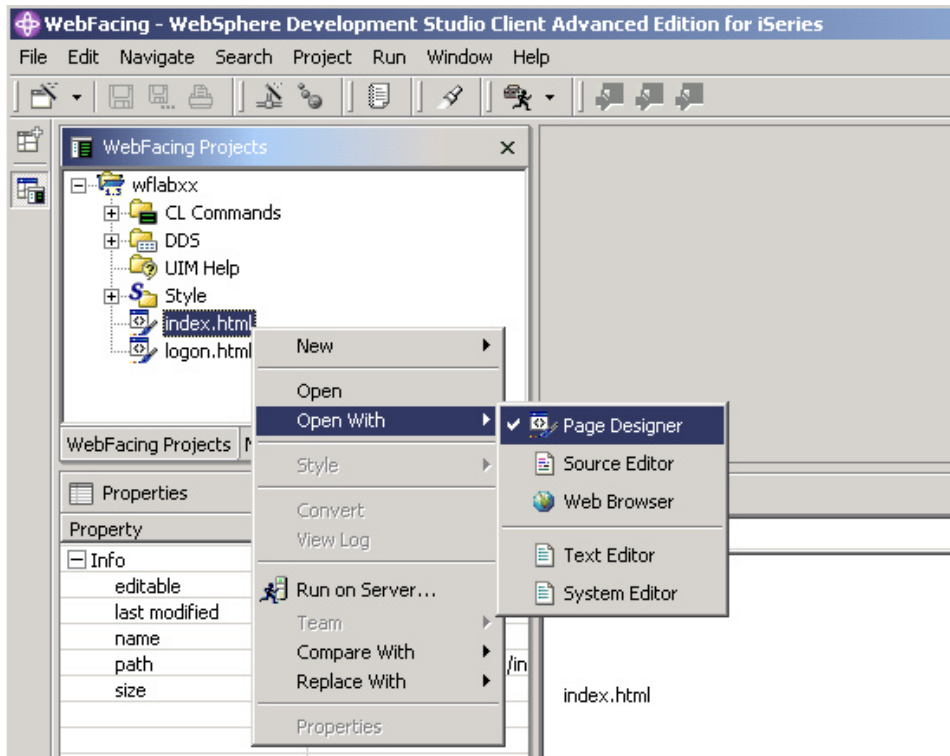? Start it as you did in the exercises before
? Start the WebFacing perspective

You should now have the WebFacing project view in your workbench environment.
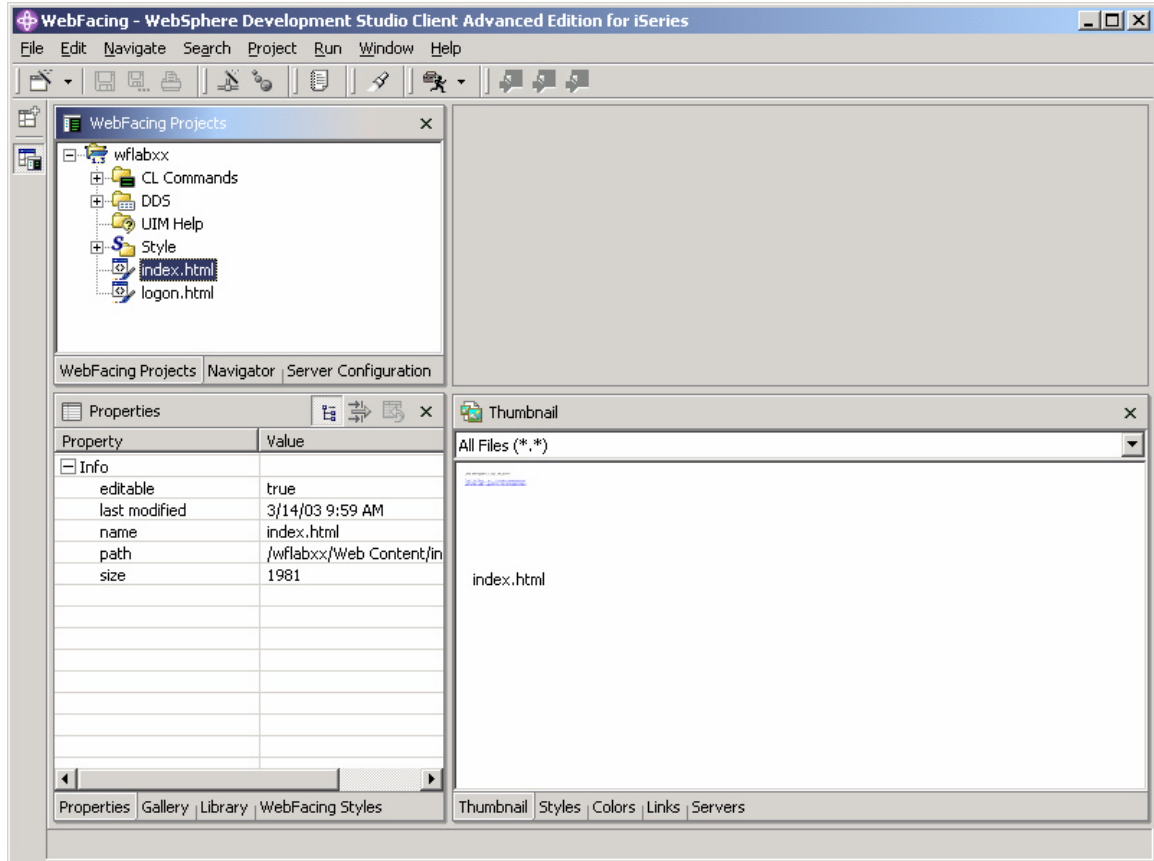
__ 2. **WebFacing view**

You will use this view to locate the **index.html** file to work with it.

? Expand the **wflabxx** project

? Locate the **index.html** file in this folder

__ 3. **Now let's look at Page Designer**

Page Designer is what **SDA** is for 5250 panels or a **GUI builder** for GUI windows, but as its name indicates, it **helps** with designing **Web pages**. As in **SDA** or **CODE Designer**, instead of keying in source statements in an editor, **Page Designer** will create the source for you from your design choices. Here, the **source generated** is **HTML tags**, instead of **DDS** statements.

To invoke Page Designer:

? **Right click** on the **File** icon of the **index.html** file and select **Open With Page Designer**.

The **Page Designer** window **will come up** on the **right side** of the workbench.

? This is the window you will be using to enhance the Web page.
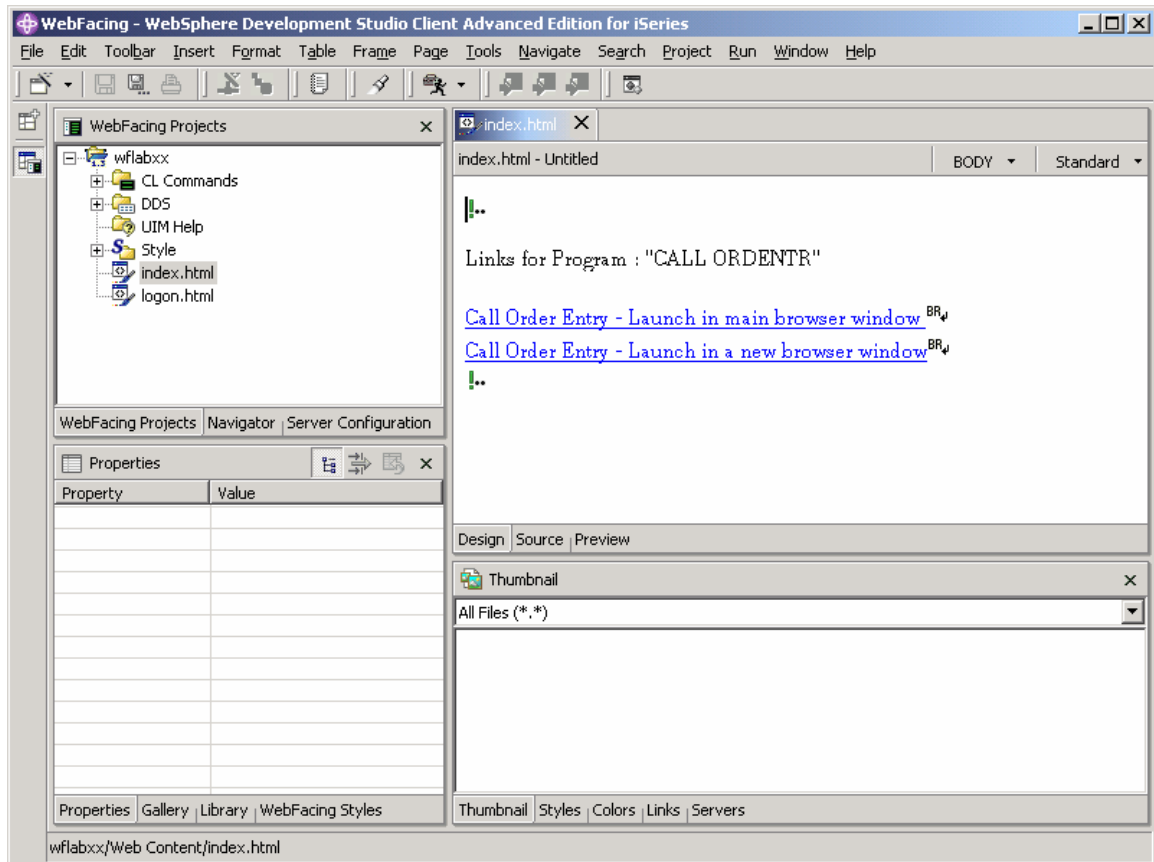
You are ready to use Page Designer. In the **Page Designer** window, you will notice three tabs at the bottom of the window. These tabs allow you to switch between different views. The initial view shows the normal design window, the following list shows all options available to you:

? The design window itself
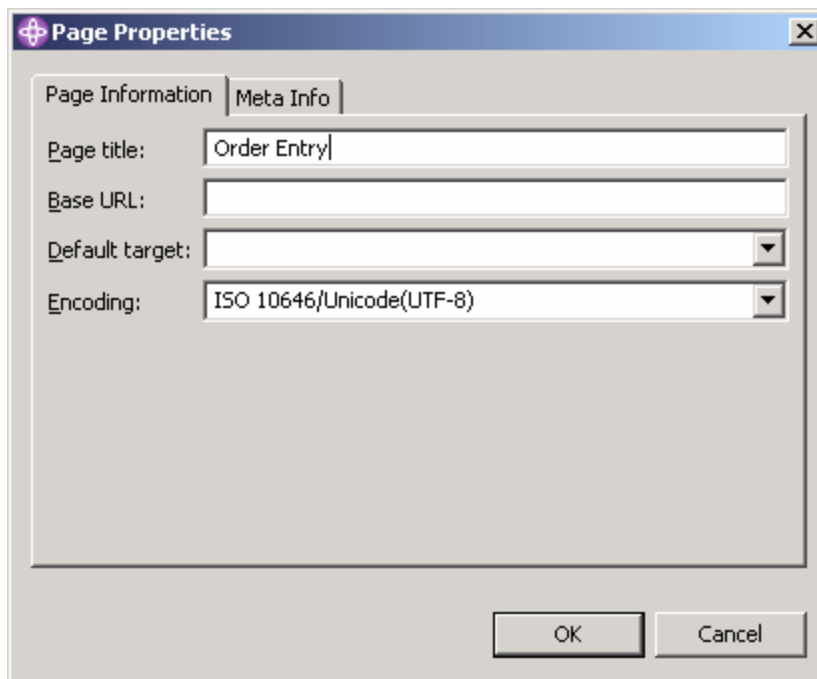? An HTML source editor window
? A Preview window

__ 4. **Working with page properties**

Move the labels down by clicking before the first TAG, which shows as an exclamation mark.
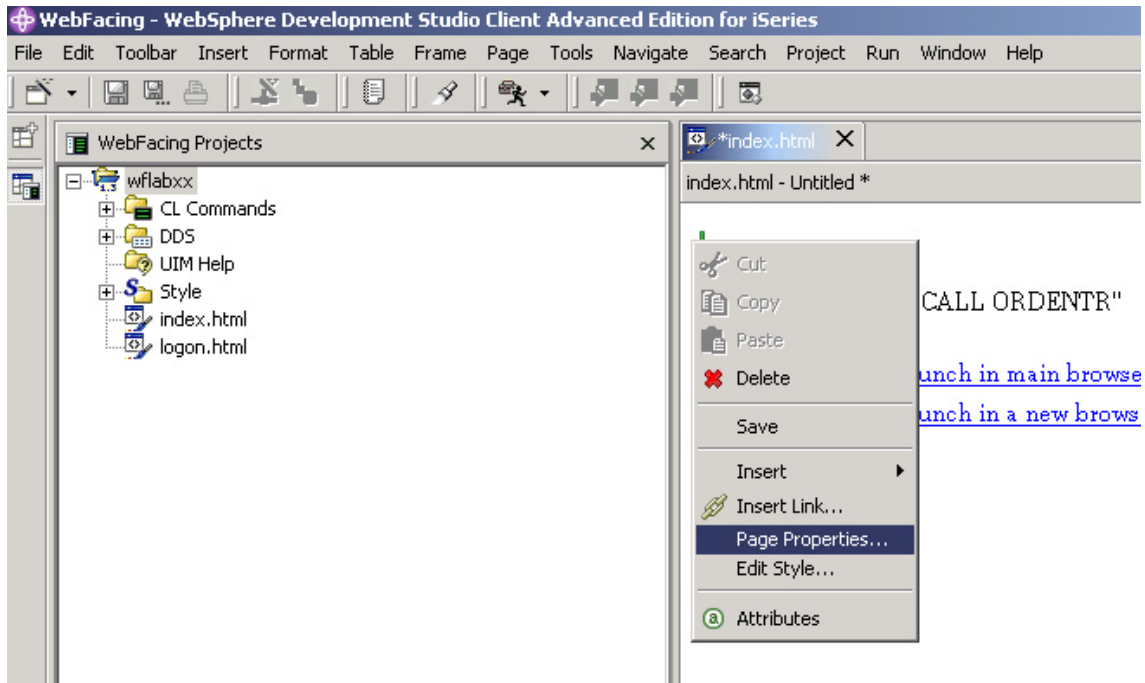
? Right mouse click on the **background** of the design window
? Select **Page Properties** from the pop-up menu

The attributes dialog will be displayed:

? **Change** the page title entry field to: **Order entry** Click OK .

__ 5. **Insert an image from the gallery**

? Click in the index.html design window before the first! This will determine where the image is inserted on to the page.
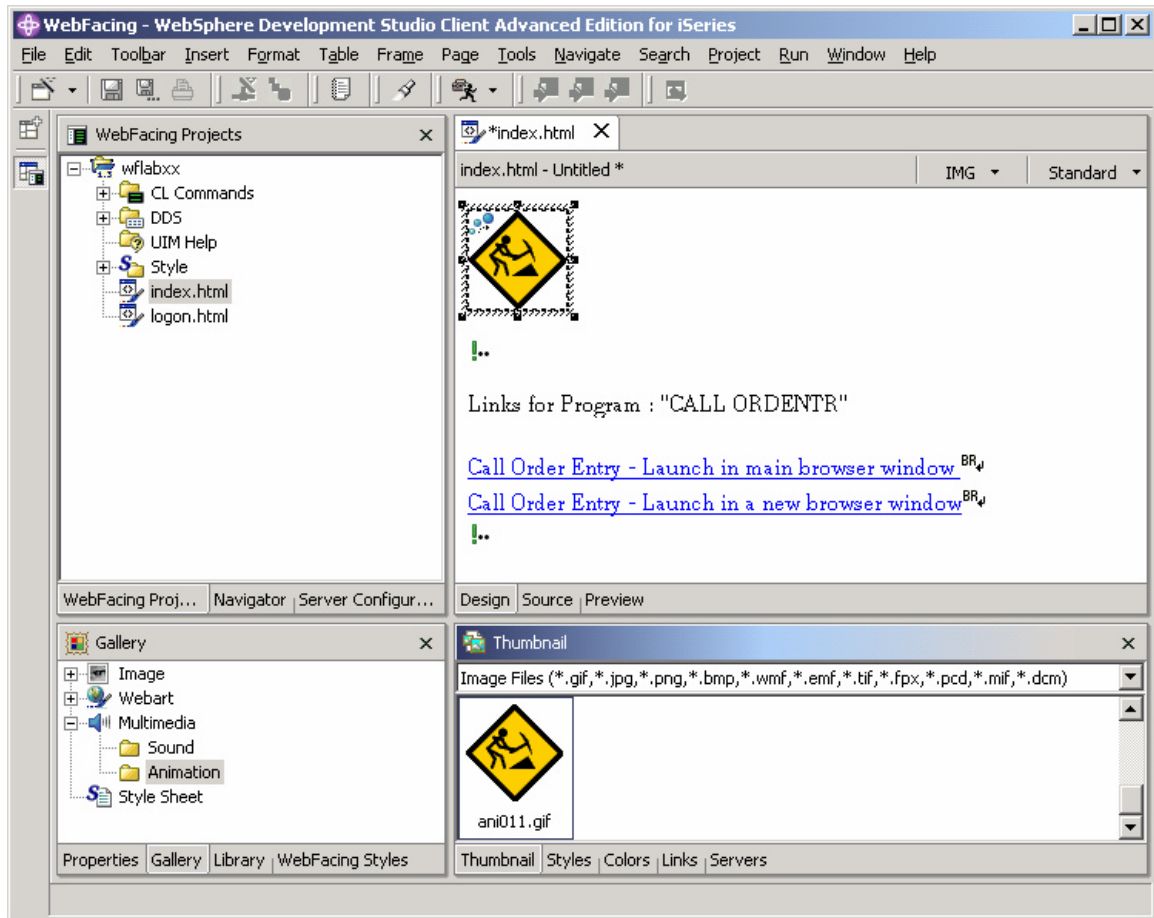? Click on the gallery view in the lower left window.
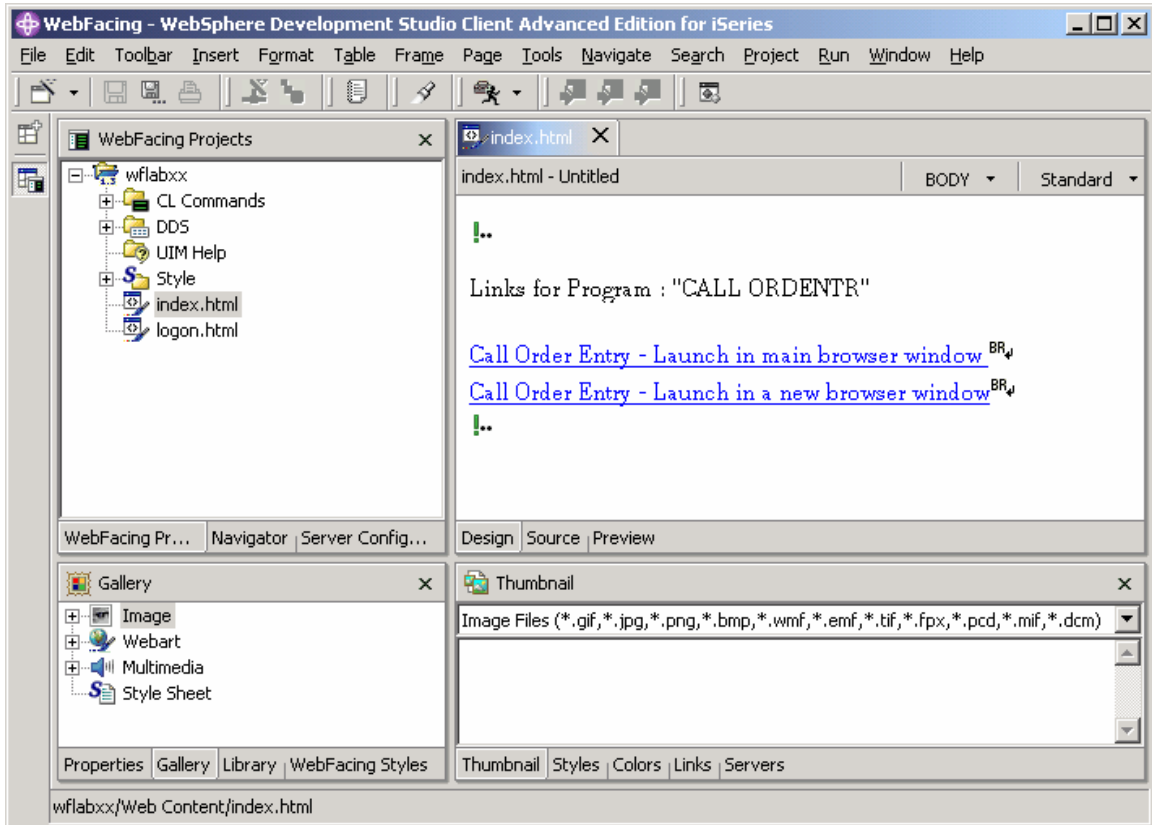
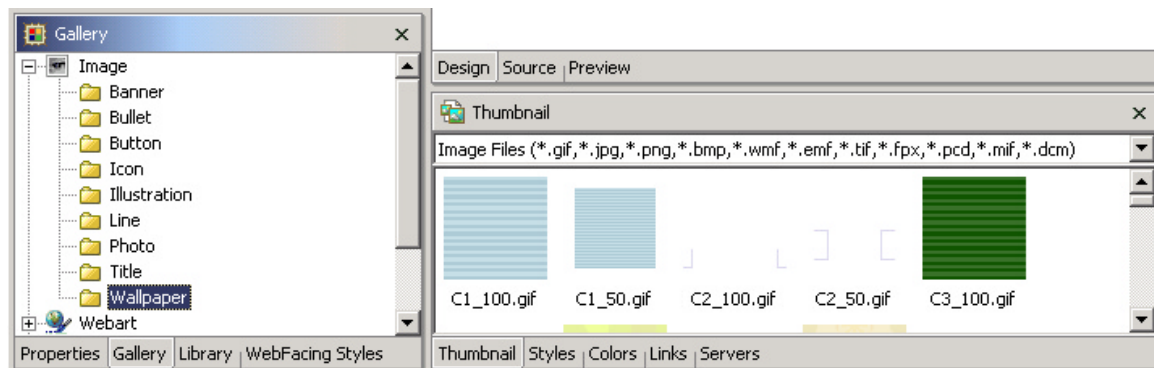? In the Gallery view, expand Multimedia by clicking on ⊞ and click on the Animation folder
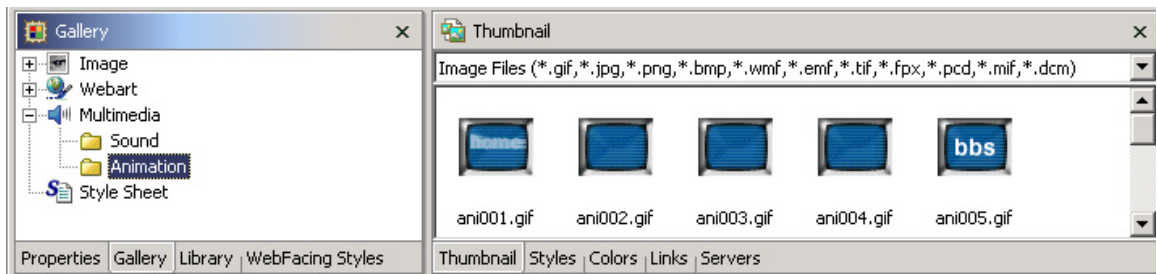
? Scroll to the bottom of the Thumbnail view and select ani011.gif by double clicking it. This will place the animation in index.html where you had the cursor.
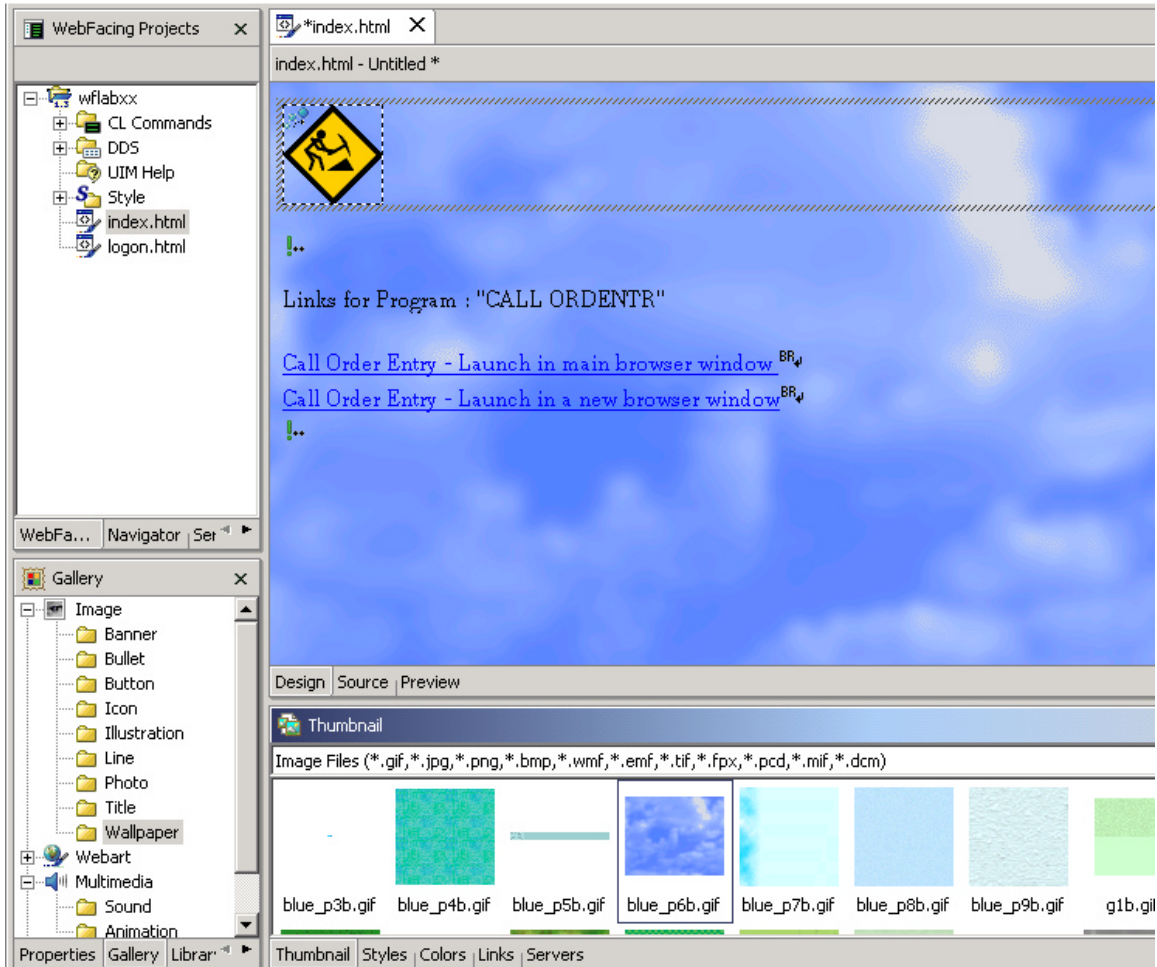
__ 6. **Changing index.html background**

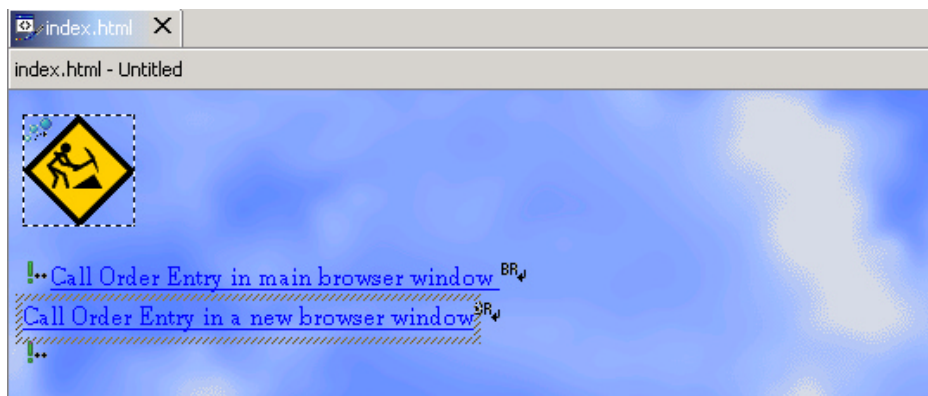? In the Gallery view, expand Image and select the Wallpaper folder.

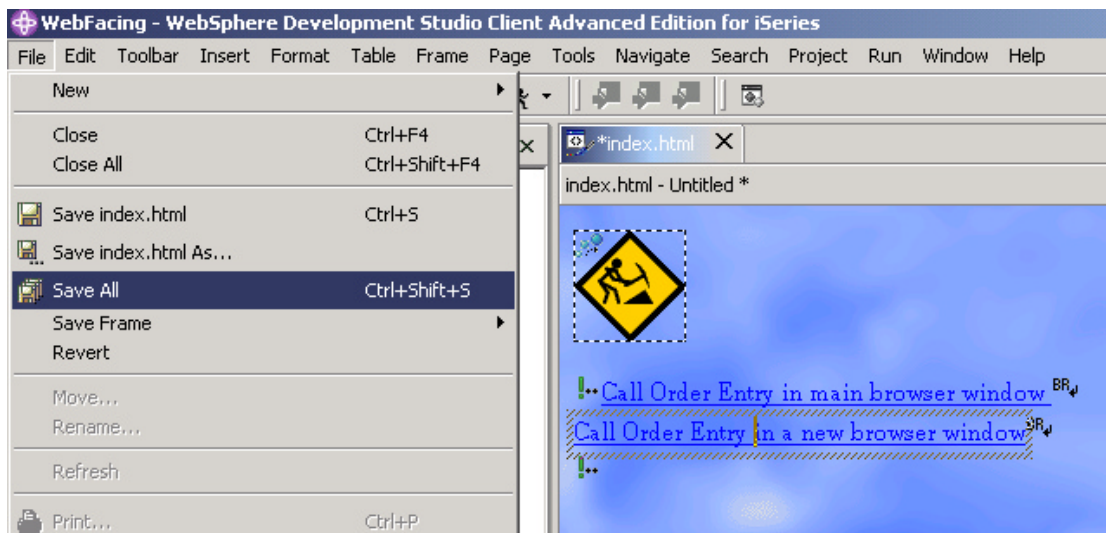? Select a wallpaper of your choice by double clicking it. In this example, we used blue_p6b.gif

__ 7. **Changing index.html text**

? You can edit text like a text editor. Delete the "Links for Program" line and shorten the other two as is shown below.
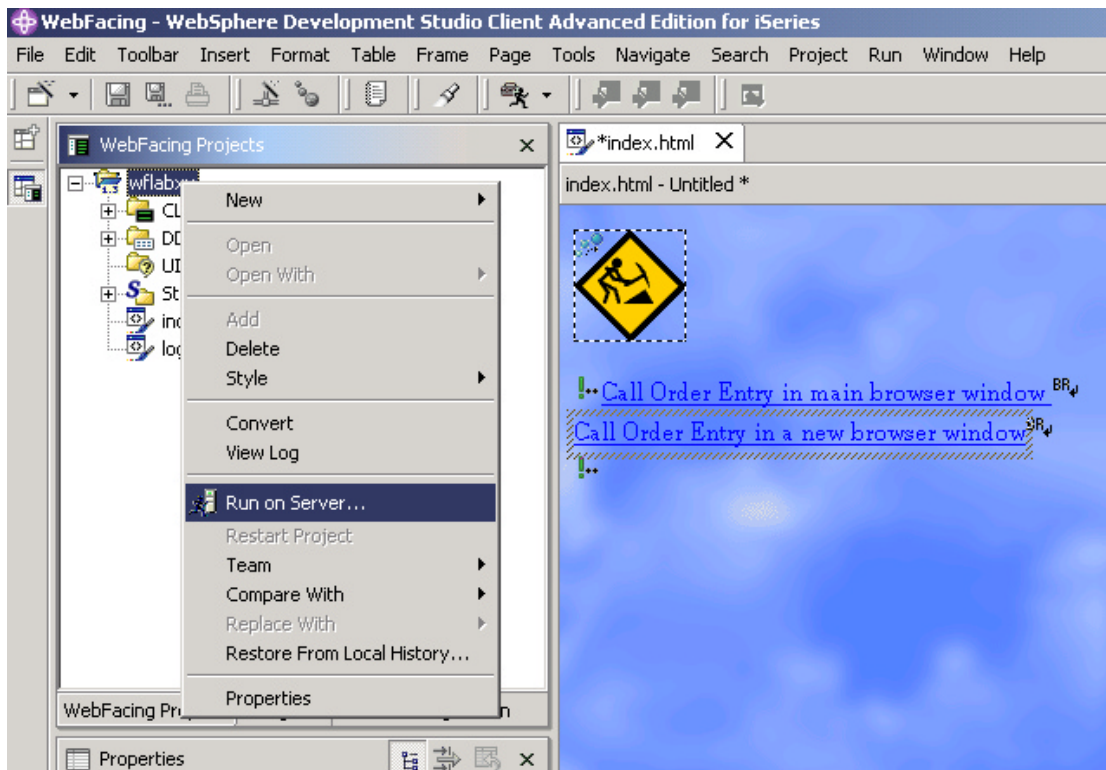
__ 8. **Save your work**

? Save all of your work by clicking on file from the top menu and selecting Save All

? Test on Server
? Right mouse click on the wflabxx project icon
? Select Run on server

? Your **new index.html** page will show