Exercise 1 Working with an HTML Template

What you will learn in Tutorial 1: How to add an HTML template to your Panther Screen?

Test the Client/Server Login Screen

1. From the Panther Cloud Desktop, double click the icon "*Panther551Cloud*" to open the Panther editor.

2. Once in the editor, open the screen *login* from the library *Workshop.lib*; View→Library TOC. (this window may already be open)

3. Test this screen in your client/server environment by pressing F2 or File->Test Mode. Do not enter a user or password, press the *Login* button and you will see a message" Please enter username and password". Press OK. Now enter some dummy data in both field and press the *Login* button. You will see another message. Press OK. Next click the *Reset* button and data in the fields will clear. To return back to edit mode chose Options->Editor or press the *escape* key twice.

Access JPL from Eclipse and a Java treat

4. The message that appears is coded in a jpl module that is included in the *login* screen, called *login.jpl*. See FOCUS->JPL Procedures. When the *login* screen runs, the jpl module is loaded in memory. We will use Eclipse to view the contents of *login.jpl*.

5. From your desktop, double click the *Eclipse* icon. Once the IDE opens, you will see the "Project Explorer" tab to your left. Expand the folder *PantherWorkshop*. This folder contains jpl, css, html and a jpg file. Double click *login.jpl* and it will open to the right. Any changes made to this JPL file, once saved will be picked up by the *login* screen. Take a second to understand the jpl procedures in jpl module.

6. Look at the unnamed procedure (1ˢᵗ 4 lines of the jpl module).Did you notice how we are invoking the Java method toString() which converts the Date Object to a string. This value is then assigned to a field and displayed. To save the screen, use Ctrl-S. Since no updates were made here, there is no need to save.

Test Login Screen in the Browser

7. Try accessing the *login* screen from the browser. Open Chrome and enter the URL, http://localhost:8080/workshop.exe/login . This link is also bookmarked. Panther has just generated an html document from your screen and displayed it in your browser!

8. Test the *Login and Reset* button. Notice messages appear on the top of the browser. This html screen looks rather unexciting but in the next few steps we will modernize it using an HTML Template.

9. Let's test updating login.jpl. Change the message that appears in line 14; msg emsg *"Please enter username and password"*   to msg emsg *"Good day! Please enter username and password*". Save the file with Ctrl-S and refresh the browser. Do you see your update?

10. Take note of this property for the *Login* and *Reset* buttons; WEB OPTIONS →Submit=Yes.This will ensure that when clicking on the pushbuttons, the JavaScript or Java attached to the button will run. This will also allow the screen to be submitted back to the server.

11. In order for Panther to generate an HTML tag for ALL fields, please set the property (for every field). WEB OPTIONS →Export to HTML =Yes

Attach an HTML Template

12. Let's add some color and format the html document. Back in ***Eclipse*** open ***login1.html*** from the PantherWorkshop folder. This html file will help format the login screen; add color, a header etc. The *{{emit}}* tags allows html to be generated for each field and its contents. Take a minute to study ***login1.html.***

13. We will now attach this html file to the ***login*** screen. Go back to the Panther editor and click on the ***login*** screen. From the Properties Window expands the property, WEB OPTIONS →HTML OPTIONS →HTML Template. Set HTML Template = ***login1.html*** and save the screen.

14. Refresh your screen in the browser and notice the difference in the screen layout. The HTML Template adds a blue background and it emits all fields to the browser in a neat fashion. Press the ***Login*** button and notice the message appears on the top of the browser. The ***Reset*** button clears data from the fields.

15. Let's test updating the html file. Change the background color in line 8 from powderblue to steelblue
    <BODY style="background-color:steelblue;>. Save the file, Ctrl-S, then refresh the browser. Notice the login screen has a darker blue background.

What you learnt in Exercise 1

- How to add an HTML Template to a Panther screen
- How to emit panther widgets in the browser using {{emit:<widgetname>}}
- How to display messages using {{form:messages}}
- How to invoke a Java method from JPL