CHAPTER 13 USER INTERACTIVITY

INFOCUS

WPL_D513

These days, users have great expectations about how they can interact with websites to find the information they need. This means it is imperative that you know how to add interactive effects to the elements in your page. And luckily, this is very easy to do in Dreamweaver.

In this session you will:

✓ gain an understanding of user interactivity
✓ learn how to create disjointed rollovers
✓ learn how to hide and show elements
✓ gain an understanding of spry
✓ learn how to insert a spry tooltip
✓ learn how to add spry effects
✓ learn how to insert *Flash* files
✓ learn how to create a *CSS* transition
✓ gain an understanding of the *CSS Transitions* panel
✓ learn how to delete a *CSS* transition.

UNDERSTANDING INTERACTIVITY

Focussing on creating engaging user experiences can be just as important to the success of a website as any other aspect of your design. User expectations for online experiences have changed dramatically over the years and designing your site to meet those expectations increasingly means adding more levels of *interactivity* to your pages.

Most interactive elements on your page are driven through JavaScript and, depending on their functionality, can become pretty complex. But, before you begin to panic because you know nothing about JavaScript programming, you don't need to!
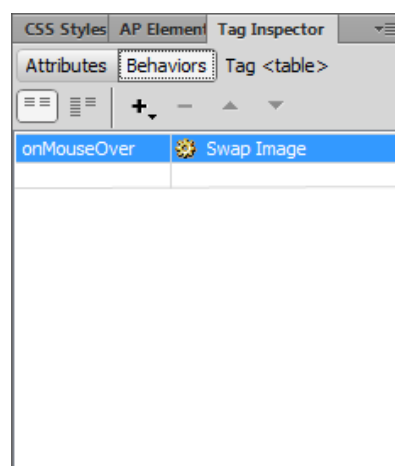
Thankfully, Dreamweaver includes many tools that allow you to add JavaScript-based interactivity and functionality to your site without having to know any JavaScript at all. In Dreamweaver you can use the *Behaviors* panel to add prebuilt scripts to your page or you can take advantage of the Spry integration to add richer user experiences to your site through Adobe's own Ajax framework.

Behaviours And Events

Behaviours and *events* are two terms that are important to understand when dealing with interactive elements in Dreamweaver. (Note that the term *behaviour* is a Dreamweaver term, not an HTML term.)

A *behaviour* is an action that occurs in response to an *event*, while an *event* is essentially a message created by a browser indicating that a user has done something. Using the *Behaviors* panel, you attach a behaviour to a page element by specifying the event that will trigger the behaviour.

Looking at the example to the right, two *behaviours* are attached to the <img> tag of a thumbnail. Both behaviours respond to different *events*. If a user clicks on the thumbnail, the browser will generate the *onClick* and *onMouseDown* events; the browser will then check if there is any JavaScript attached to the image that the browser is supposed to call. The *onMouseDown* event will result in an image on the page being swapped to a different image and the *onClick* event will result in specific elements being either hidden or shown.
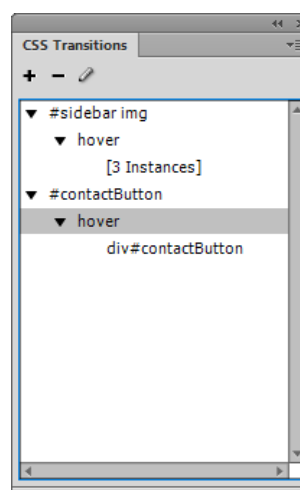
Behaviours Panel

The *Behaviours panel* makes it very easy to add complex interactivity to your site. It also makes it easy to control and edit the scripts throughout the development process.

If you click on **+** in the panel you will see a full list of behaviours available to you, based on the type of element you have selected. If you want to edit one of the behaviours, you simply double-click on it to open the *Behaviours* dialog box for the selected behaviour and make the changes as desired. And no JavaScript knowledge is required at all!

CSS Transitions Panel

CSS3 includes the new CSS Transitions property and is controlled through the *CSS Transitions panel*. CSS transitions enable you to create an animation from one CSS property to another CSS property. The panel provides you with a straightforward method for creating the hefty code that is otherwise required to make the animations work.

CREATING DISJOINTED ROLLOVERS

The **Swap Image** behaviour lets you create **image rollovers** by selecting an image and choosing which image to replace it with when the image is clicked. In this exercise you will create a **disjointed rollover** – this is where interacting with one image causes another image on the page to change. You will use the swap image behaviour to alter the large image when a thumbnail is clicked.
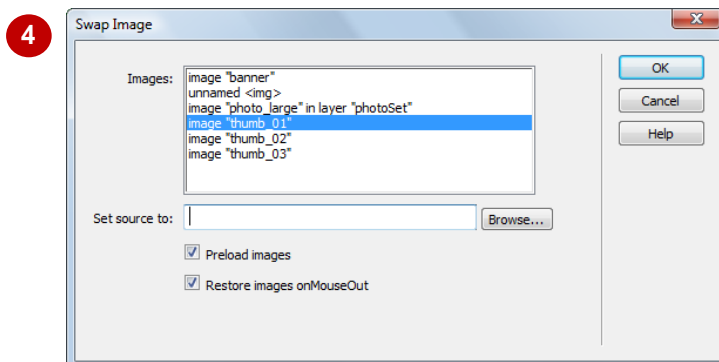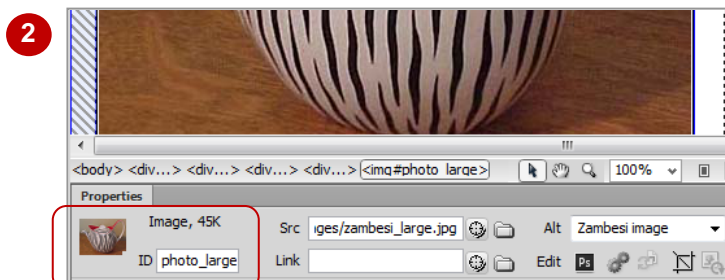
Try This Yourself:

Open File

Before starting this exercise open teapots.html in the interactive/products subfolder...

1 Select **Site** > **New Site**, type the details as shown, then click on **[Save]**

2 Click on each image and notice that they all have a unique name (**ID**)

3 Click on the top thumbnail, then open the **Behaviours** panel and click on **+.** to open a drop-down menu

4 Select **Swap Image** to open the **Swap Image** dialog box

This dialog box is asking which image you want to swap...

5 Click on **image "photo_large"**, click on **[Browse]**, then double-click on _images/zambesi_large.jpg

The asterisk indicates that it's the image to be swapped...

6 Deselect **Restore images onMouseOut** and click on **[OK]**

Dreamweaver will create the onMouseOver event by default but this is not the event you require...

7 Click on **onMouseOver**, click on the drop arrow and select **onMouseDown**

8 Repeat the steps **3** to **7** to create the **onMouseDown** event for the other two thumbnails as shown

1
Site name	InteractiveTT
Local site folder	C:\Course Files for Dreamweaver CS6 \interactive\

2

4 Swap Image

Images:
image "banner"
unnamed <img>
image "photo_large" in layer "photoSet"
image "thumb_01"
image "thumb_02"
image "thumb_03"

Set source to:

☑ Preload images
☑ Restore images onMouseOut

OK
Cancel
Help

6

CSS Styles | AP Elements | Tag Inspector
Attributes | Behaviors | Tag <img>
onMouseOver ⚙ Swap Image

The onMouseOver event triggers the swap image behaviour when the user rolls the mouse over the thumbnail.

The onMouseDown event triggers the swap image behaviour when the user clicks on the thumbnail.

8
Set source to	_images/walter_large.jpg
Set source to	_images/copeland_large.jpg

For Your Reference…

To **create** a **disjointed rollover**:

1. Click on the image
2. Click on **+.** in the **Behaviours** panel and select **Swap Image**
3. Click on the image to be swapped out
4. Browse to the image that is to replace it

Handy to Know…

- Leave **Preload images** ticked in the **Swap Image** dialog box as this will prevent a flicker from happening the first time a user clicks on the thumbnail. Deselect **Restore images onMouseOut** as you want the larger image to close when the user moves their mouse off the thumbnail.

HIDING AND SHOWING ELEMENTS

Beneath the large image are three absolutely positioned captions stacked on top of each other. Using CSS you'll hide all paragraphs except for the initial caption. Then, using the *Show Hide* *Elements* behaviour you'll turn them on one by one. The *Show Hide Elements* behaviour relies on the ability to change the *visibility* property of an element to either *visible* or *hidden*.

Try This Yourself:

Continue using the previous file...

1 Select **View** > **Styles Rendering** > **Display Styles** to turn off the styles, then click on the three captions below the top image – they each have a unique ID

2 Display styles again, click on *main.css*, switch to *Code* view and scroll down to line *290* – this selector groups together the three captions

3 Click to the right of the *float:left;* property, press Enter and type **visibility:hidden;**

This hides all captions. Note the next empty rule – this is the default caption and you must set its initial visibility...

4 Click in the blank line at line *302* and type **visibility:visible;** then save the file and switch to *Design* view – only one caption will be visible now

5 Click on the top thumbnail image, click on ⊞ in the *Behaviours* panel and select **Show-Hide Elements**, then scroll down to see the *p "caption"* elements

6 Click on *p "caption1"* and click on [Show], click on *p "caption2"* and click on [Hide], click on *p "caption3"* and click on [Hide], then click on [OK]

7 Repeat steps *5* and *6* for the other two thumbnails as shown, then save and preview the page
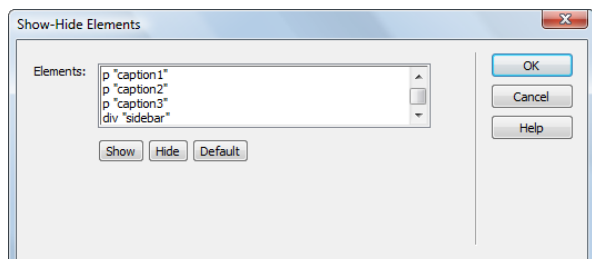
2
```
289 │ }
290 │ #mainContent #photoSet #photoGroup #caption1, #mainContent
    │ #photoSet #photoGroup #caption2, #mainContent #photoSet
    │ #photoGroup #caption3, #mainContent #photoSet #photoGroup
    │ #caption4 {
291 │     position:absolute;
292 │ !important
293 │     top:365px;
294 │     width:400px;
295 │     overflow:hidden;
296 │     margin-left: 40px;
297 │     margin-right: 40px;
298 │     float: left;
299 │ }
300 │ #mainContent #photoSet #photoGroup #caption1{
301 │
302 │ }
303 │ #sidebar {
```

3
```
289 │ }
290 │ #mainContent #photoSet #photoGroup #caption1, #mainContent
    │ #photoSet #photoGroup #caption2, #mainContent #photoSet
    │ #photoGroup #caption3, #mainContent #photoSet #photoGroup
    │ #caption4 {
291 │     position:absolute;
292 │ !important
293 │     top:365px;
294 │     width:400px;
295 │     overflow:hidden;
296 │     margin-left: 40px;
297 │     margin-right: 40px;
298 │     float: left;
299 │     visibility: hidden;
300 │ }
301 │ #mainContent #photoSet #photoGroup #caption1{
302 │
303 │ }
```

4

The funky black, white and pink Zambesi teapot will add glamour to your table

5

Show-Hide Elements

Elements: p "caption1"
p "caption2"
p "caption3"
div "sidebar"

[Show] [Hide] [Default]

[OK] [Cancel] [Help]

7 *Walter*   Show caption 2, hide captions 1 & 3
      Copeland   Show caption 3, hide captions 1 & 2

For Your Reference…

To *show* or *hide* an *element*:

1. Click on the element
2. Click on ⊞ in the *Behaviours* panel
3. Select **Show-Hide Elements**
4. Click on the desired ID
5. Click on **[Show]** or **[Hide]** as appropriate

Handy to Know…

- The *Swap Image* behaviour only works on images so changing other page elements is outside its capabilities.
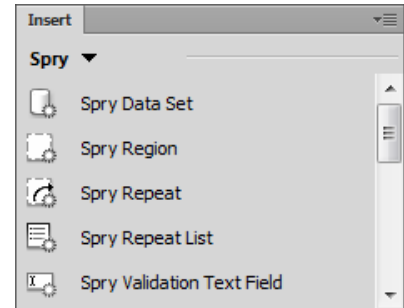
UNDERSTANDING SPRY

Ajax (or ***Asynchronous JavaScript and XML***) is the term describing the use of JavaScript, HTML, CSS, XML and dynamic HTML that is currently transforming web experiences. As more and more web designers build Ajax-driven pages, standardised Ajax libraries are emerging to make the process of creating these types of pages easier. Adobe has its own Ajax library called ***Spry***.

Spry is a set of CSS and JavaScript files that make building interactive applications easier. To make Spry accessible to all designers, Adobe has integrated many Spry-based tools into Dreamweaver. When using Spry objects, like Spry form validation widgets and the Spry Tooltip widget, Dreamweaver will add all the necessary code to your page and copy any required external CSS and JavaScript files to your site.

You can insert various Spry objects and widgets using the tools on the ***Spry*** tab of the ***Insert*** panel (as shown to the right).

If your page includes spry widgets, when you change to ***Code*** view you will see code to external links near the top of the page. For example:
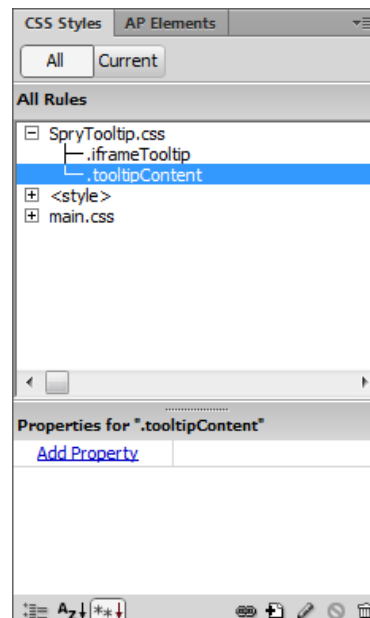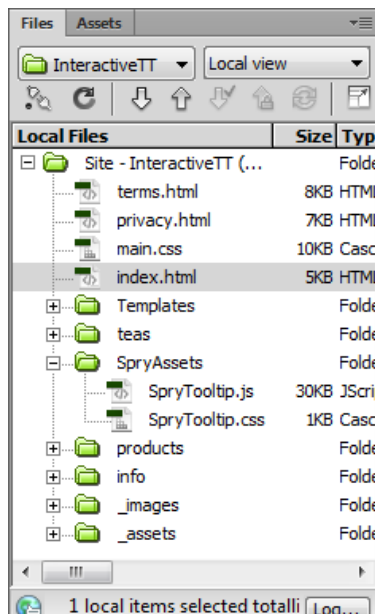
```
24
25   <script src="SpryAssets/SpryTooltip.js" type="text/javascript"></script>
26   <!-- InstanceEndEditable -->
27   <!-- InstanceParam name="bannerGraphic" type="URL" value="_images/home_banner.jpg" -->
28   <!-- InstanceParam name="homeClass" type="text" value="current" -->
```

The external JavaScript file is driving the tooltip while the external CSS file is styling it.

If you look in the ***Files*** panel you will see that a new folder ***SpryAssets*** has been created at the root of the site. You don't need to worry about these files except when you are uploading your site – you must upload these files with the rest of the files to ensure your site works correctly. If you look in the ***CSS Styles*** panel you will also see that a new CSS file has been added.

Dreamweaver's Spry integration helps put complex Ajax interactivity in the hands of all designers. Using Spry objects and widgets is a great way to introduce yourself to working within a larger Ajax framework. The CSS and JavaScript used in Spry objects is entirely customisable. So, as you get more comfortable understanding how these objects work, you'll find ways to customise them and make them your own.
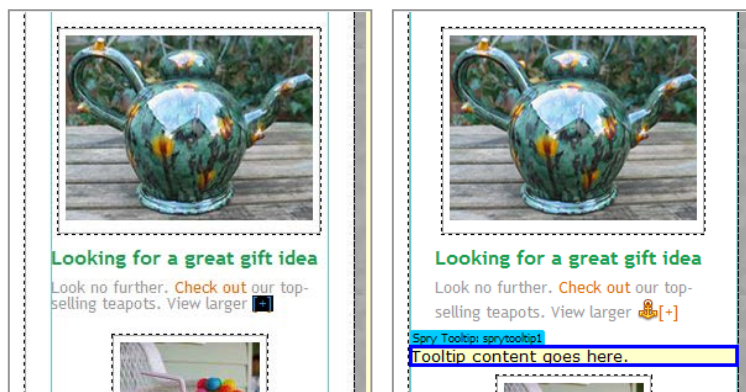

INSERTING SPRY TOOLTIPS

The **Spry Tooltip** widget is particularly useful and easy to work with. You can insert a tooltip widget that lets you have a trigger object, which is usually a link or image, that causes the tooltip to appear somewhere on the page. The contents, appearance, location and behaviour of the tooltip are customisable. In this exercise you will use a tooltip to temporarily display an image.

Try This Yourself:

Before starting this exercise you MUST open index.html...

1 Select **[+]** under **Looking for a great gift idea** in the sidebar

2 Open the **Insert** panel, display the **Spry** options, then click on **[Spry Tooltip]**

A new <div> tag called sprytooltip1 and an anchor object will be inserted in the page...

3 Click to the left of the placeholder text **Tooltip content goes here.** and using the **Assets** panel, drag **walter_tooltip.png** into the tooltip

4 Type **walter teapot** in **Alternate text**, then click on **[OK]** to insert the image

5 Delete the placeholder text, then click on the blue **Spry Tooltip** tab to display the tooltip properties

6 Type **-700** in **Horizontal offset**, **-100** in **Vertical offset**, **500** in **Hide delay** and click on **Fade**

7 Save all files, preview the page and hover over **[+]** – notice the cream background colour, yuck

8 Return to Dreamweaver, display the **SpryTooltip.css** styles in the **CSS Styles** panel and delete the **background-color** property from the **.tooltipContent** selector

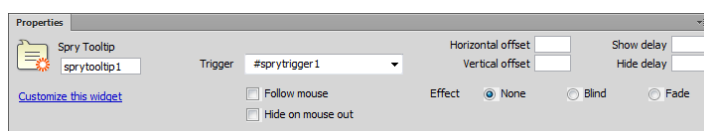**9** Save all files and preview the page again

1

2

4

5

For Your Reference…

To **insert** a **Spry Tooltip**:

1. Select the trigger object (link or image)
2. Click on **[Spry Tooltip]** in the **Insert** panel (**Spry** options)
3. Insert the tooltip and delete the placeholder text
4. Modify the tooltip properties and CSS

Handy to Know…

- You can put any content into the spry tooltip. Remember, however, that the content is sitting in the page (although it is initially hidden) and it has to load with the rest of the page. So, if you have too many tooltips or if you put a lot of content into them, you could slow down your page's overall loading time.

ADDING SPRY EFFECTS

Dreamweaver comes with a full set of *Spry effects* that can add interactivity and functionality that is not possible with regular HTML. Spry effects focus on animations and transitions that can enhance your visual interface. In this exercise you will add an effect that results in the large photo fading in and out when you click on the thumbnails.

Try This Yourself:

Open File

Before starting this exercise you MUST open products/cups.html...

1 Click on the large image on the page, then click on ➕ in the *Behaviours* panel and select **Effects** > **Appear/Fade** to open the *Appear/Fade* dialog box

2 Ensure *<Current Selection>* appears in *Target Element*, type **1500** in *Effect duration* and select *Appear* in *Effect*

3 Type **20** in *Appear from*, then click on **[OK]**

The default event for this effect is onClick – in other words, a user would need to click on the large image for it to appear. Let's change this...
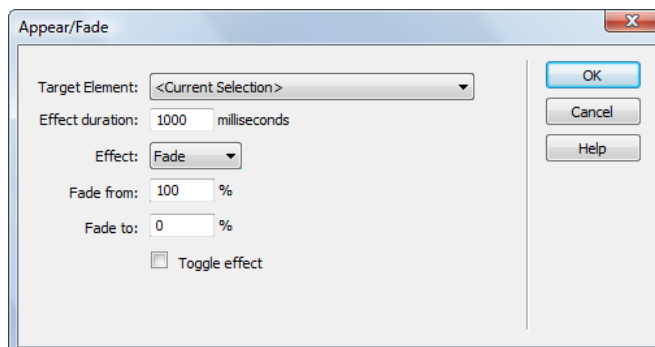
4 Click on *onClick* in the *Behaviours panel* and select **onLoad**

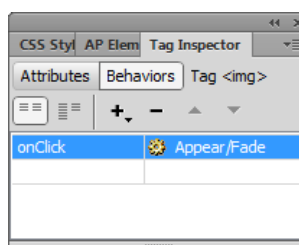*Now the image will fade in each time it is loaded...*

5 Save all files (clicking on **[OK]** to save the dependent file), then preview the page

Spry effects provide another way to add richer user experiences to your sites. They are easy to use and just like behaviours, they are easy to update or modify at any time
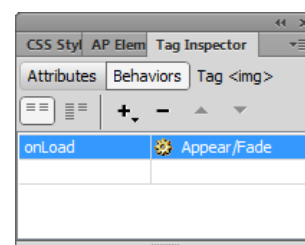
1

Appear/Fade	
Target Element:	<Current Selection>
Effect duration:	1000 milliseconds
Effect:	Fade
Fade from:	100 %
Fade to:	0 %
☐ Toggle effect	

OK · Cancel · Help

3

CSS Styl | AP Elem | Tag Inspector
Attributes | Behaviors | Tag <img>
➕ — ▲ ▼
onClick · ☀ Appear/Fade

4

CSS Styl | AP Elem | Tag Inspector
Attributes | Behaviors | Tag <img>
➕ — ▲ ▼
onLoad · ☀ Appear/Fade

5

Our Creative Cups

For Your Reference…

To *insert* a *Spry effect*:

1. Select the element for the effect
2. Click on ➕ in the *Behaviours* panel
3. Select **Effects** and the desired option
4. Check that Dreaweaver has inserted the appropriate event in the *Behaviours* panel

Handy to Know…

- Ticking *Toggle effect* in the *Appear/Fade* dialog box would result in the image appearing the first time you clicked on it and then fading with a second click.
- Making an image appear from *0%* tends to make it flicker a little so it is better to start with a higher percentage.

INSERTING FLASH FILES

Dreamweaver and Flash have been partners in web development for a very long time. This means that it is incredibly easy to *place Flash content* in a page. The only condition is that you need access to the Flash *.swf* files. Swf (pronounced *swif*) files are the published files that can be placed in web pages.

Try This Yourself:

Open File

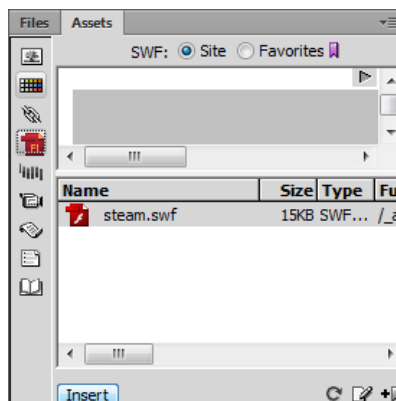*Before starting this exercise you MUST open info/brewing.html...*

1 Open the *Assets* panel and click on *SWF*

This lists all Flash assets in your site...

2 Switch to *Code* view and click between the opening and closing *<div id="flash">* tags in line *69*

3 Drag *steam.swf* from the *Assets* panel to the position between the two *<div id="flash">* tags

The Object Tag Accessibility Attributes dialog box will open...

4 Type **flash video** in *Title* then click on **[OK]**

Dreamweaver will automatically insert a large amount of code...

5 Switch back to *Design* view, click on the *Flash* object then click on **[Play]** in the *Properties inspector*

6 Click on **[Stop]** to stop playing the video, then save (clicking on **[OK]** to copy the dependent files to the site) and preview the page

1
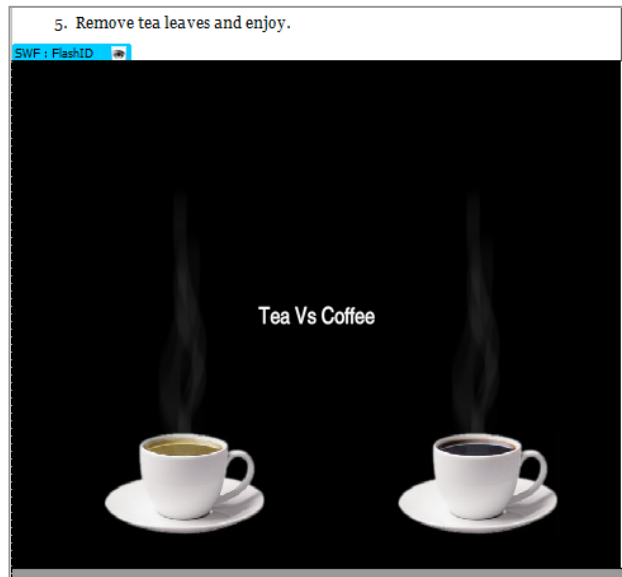
```
67
68   </div>
69   <div id="flash"> </div>
70   <div id="footer">
71     <p>&copy;  Terrific Tea 2009 <a href="privacy.html">
     a></p></div>
72   </div>
73   </body>
74   </html>
```

2

5

For Your Reference…

To *insert* a *Flash file*:
1. Position the cursor
2. Drag the .*swf* file from the *Assets* panel

Handy to Know…

- Flash files with the *.fla* file extension are development files.

CREATING A CSS TRANSITION

CSS3 includes the new CSS Transitions property. A CSS transition is basically an animation from one CSS property to another CSS property. Although it sounds complicated, they are easily created using the **CSS Transitions** panel. Because this is a very new feature, Safari, Chrome and Firefox support CSS transitions, but you will need Internet Explorer version 10.

Try This Yourself:

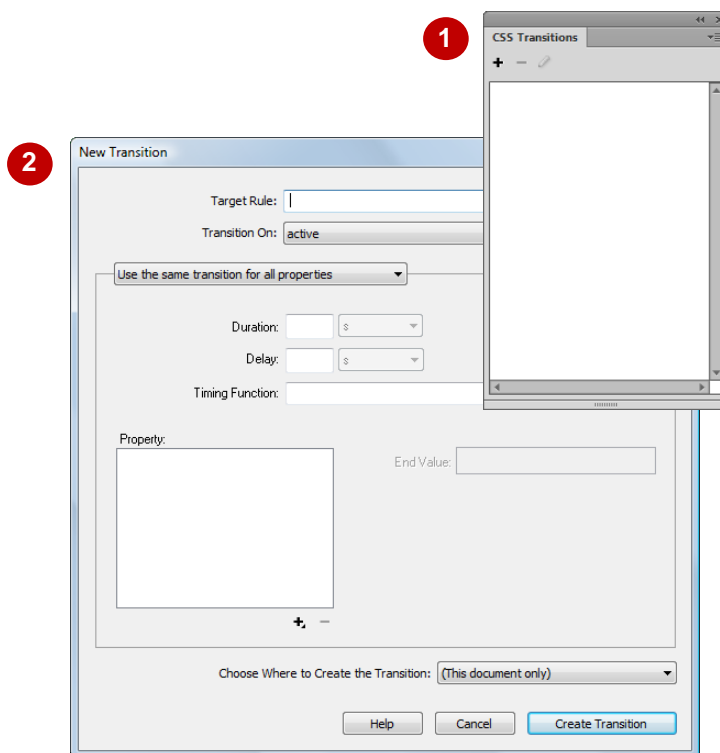*Open File*   *Before starting this exercise you MUST open teas/intro.html...*

1   Select **Window** > **CSS Transitions** to open the panel

2   Click on **Create New** ➕ to open the **New Transition** dialog box

3   Click on the drop arrow ▼ for **Target Rule** and select **#sidebar img**

We will apply a transition to each of the sidebar images…

4   Select **hover** in **Transition On**, then click on ➕ in **Property**, select **border-color** and type **#FF3** in **End Value** – press `Tab`

This will apply a yellow border to an image when you hover the mouse over it…

5   Add three more **Properties** as shown

6   Change **Duration** to **0.5s** and select **ease-in-out** in **Timing Function**

7   Click on **[Create Transition]** to see the new transition in the panel – it has been applied to three items

8   Save all pages and preview the page in *Firefox*, *Chrome* or *Internet Explorer 10* if you have it – hover over one of the images to see the effect

border-width	20px
height	250px
width	300px

For Your Reference…

To **create** a **CSS Transition**:

1. Select **Window** > **CSS Transitions**
2. Click on **Create New** ➕ and select a **Target Rule**
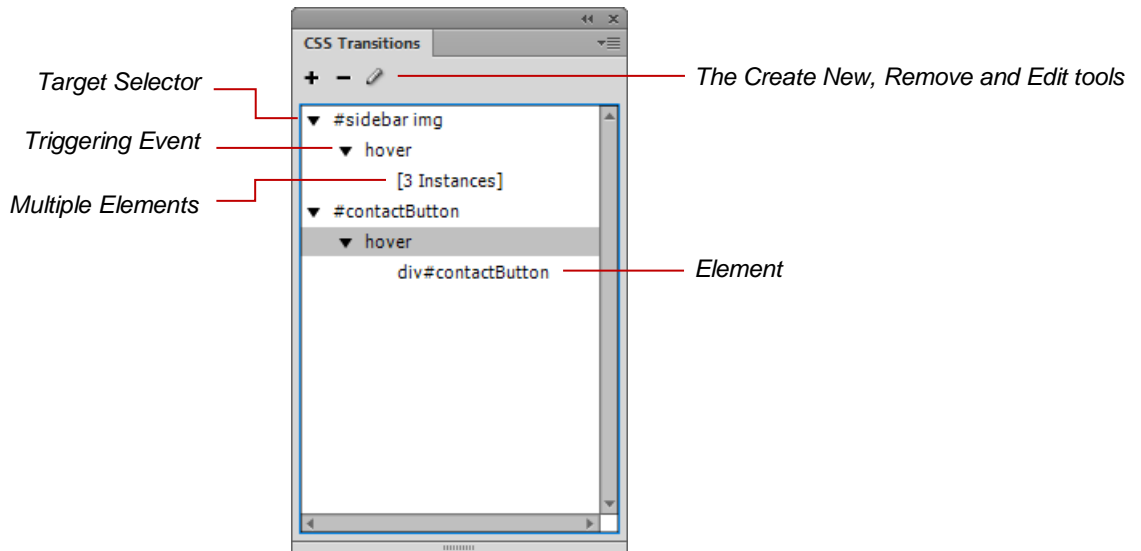3. Click on ➕ to add properties
4. Click on **[Create Transition]**

Handy to Know…

- You can dock the floating **CSS Transitions** panel to a more practical position; perhaps next to the **CSS Styles** panel.
- Select the option **Use a different transition for each property** in the **New Transition** dialog box to apply different durations, delays and timings to each property.

UNDERSTANDING THE CSS TRANSITIONS PANEL

The **CSS Transitions panel** lists all of the transitions associated with the current page. Each transition listed is displayed in three parts, discussed below. The panel enables you to add, remove and edit transitions and, although it looks straightforward, the panel is actually a little bit more complicated than you would expect.

Target Selector

Triggering Event

Multiple Elements

The Create New, Remove and Edit tools

Element

The CSS Transitions panel lists three parts to every transition: the target selector; the triggering event and; a list of matched elements. The target selector is what the trigger targets – these are the targets you select when you create a new transition (**Target Rule** in the **New Transition** dialog box). In the image above, we selected **#sidebar img** to apply the transition to.

Following, and indented below the target selector, is the *trigger* – this is the action that needs to be taken for the transition to take effect. In our example, the user must *hover* the mouse over the item to make the transition occur. You can have more than one trigger listed per target. For instance you could set a transition for when the user hovers over an element and a different transition for when the same element is clicked on.

Indented below the trigger event is a list of elements that match the target selector. In our example, the same transition is applied to *3 instances* of one element, as we effectively applied it to the images in the sidebar (of which there were three). In the second transition, only one element is listed: the **Contact** button at the top of the page.

Creating a new transition is a simple matter of clicking on the **Create New Transition** tool ➕ to display the **New Transition** dialog box and completing the required fields. Editing an existing transition can be achieved by clicking on the transition to edit and then clicking on the **Edit Selected Transition** tool ✏️. Lastly, deleting a transition can be achieved by selecting the transition in the list and then clicking on the **Remove…** tool ➖. Be warned, though: a bit of care and understanding needs to be exercised when deleting a transition as you may delete more than you bargained for. Read the following exercise **Deleting a CSS Transition** for more information.

DELETING A CSS TRANSITION

When you add a transition, Dreamweaver works on two styles: the initial target selector (the style before the transition/animation begins) and the finished state (e.g. a pseudo-class like *:hover*).

When you ***delete a CSS transition***, Dreamweaver can immediately tell which styles you want to edit.

Try This Yourself:

Open File

Before starting this exercise you MUST open the file [Primary File]...

1 In the ***CSS Transitions*** panel, click on the ***#sidebar img*** target selector to select it
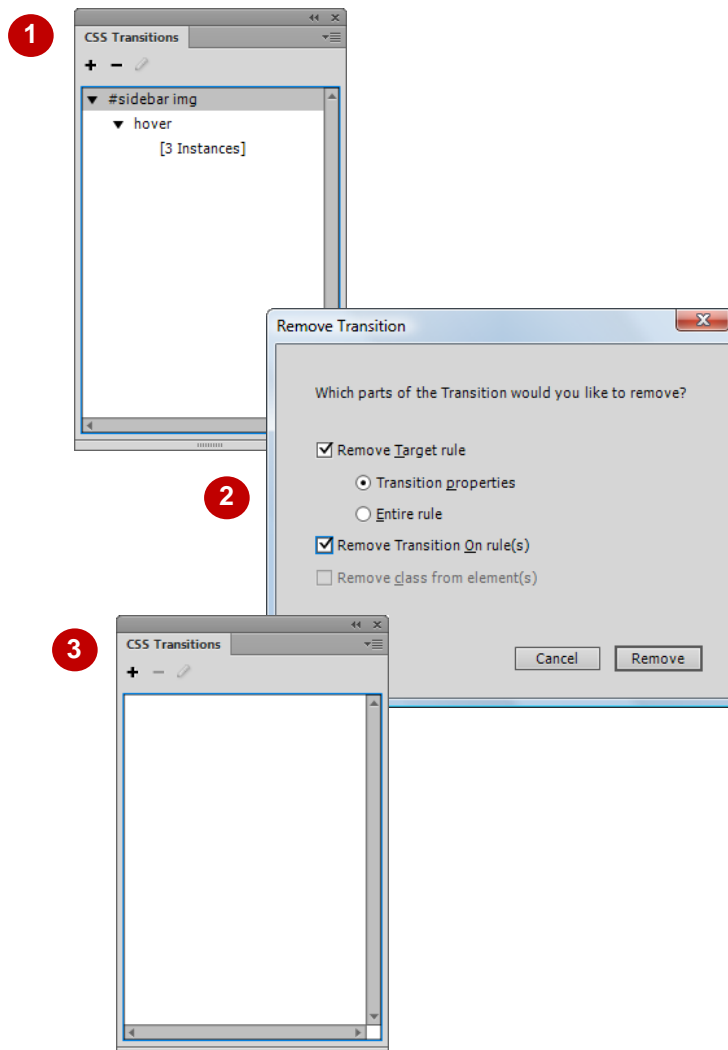
This will delete all triggers associated with the selector – if you instead wanted to delete only one of several triggers for a selector, then click on the trigger to delete…

2 Click on ***Remove…*** ➖ to display the ***Remove Transition*** dialog box

3 Ensure ***Remove Target rule*** is ticked, turn on ***Transition properties*** and tick ***Remove Transitions On rule(s)***

4 Click on **[Remove]** to delete the transition

The CSS Transitions panel will now be blank…

Remove Target Rule *relates to the style controlling the appearance of the target element before the transition begins, which also contains the CSS transition property. By selecting* **Transition properties** *you remove the CSS transition property but leave the rest of the style untouched (e.g font, font-size, margin etc). Select* **Entire rule** *if you want to completely remove a style, formatting and all.* **Remove Transition On rule(s)** *deletes the pseudo-class style (e.g. hover) thereby removing the end result of the animation (i.e. the style used to format the element when the user interacts with it).*

For Your Reference…

To ***delete*** a ***CSS transition***:

1. In the ***CSS Transitions*** panel, click on the target selector to delete
2. Click on ***Remove…*** ➖
3. Select the options as required
4. Click on **[Remove]**

Handy to Know…

- Be careful when deleting transitions because Dreamweaver will make several changes which cannot simply be reversed by selecting **Edit** > **Undo**.

NOTES: