How to create a prototype

In this guide, you learn how to use Fireworks to combine a design comp and a wireframe to create an interactive prototype for a widget.

A *prototype* is a semi-functional interactive model that delivers a preview of the look, feel, and functionality of your web project (**Figure 1**). Prototypes made in Fireworks can also be exported to formats that can be opened in Dreamweaver and previewed in a web browser.



Figure 1 Fireworks prototype (left), as viewed in a web browser (right)

Prototyping workflow

By combining the Pages panel with other powerful Fireworks features, you can quickly create interactive web and software prototypes. You can convert a finalized prototype to a functioning site by simply exporting it to HTML and CSS files for use in Dreamweaver and a web browser. Use the following workflow to transform your previously created design comp into a fully functioning interactive prototype.

1. Create the pages

In the Pages panel, create the desired number of pages or screens for your initial design. As the design evolves, you can add or subtract pages as needed.

2. Lay out common design elements

On the canvas, lay out design elements you want to share across multiple pages, such as navigation bars and background images.

3. Share common elements across multiple pages

When you share common elements, a single change automatically updates all affected pages. Use a master page to share elements or share layers to copy subsets of elements.

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4. Add unique elements to individual pages

On each page, add unique design, navigation, or form elements. In the Common Library panel, you'll find many buttons, text boxes, and pop-up menus that speed up the design process.

5. Simulate user navigation with links

From web objects such as slices, hotspots, and navigation buttons, link between the various pages of your prototype.

6. Export the finished interactive prototype

Fireworks offers multiple output formats for your prototype, all of which retain hypertext links for page navigation.

Workflow steps 1-3

In this section, you open your original design comp, create the number of pages required for the prototype, and use guides to set page element alignment.

A single Fireworks PNG file can contain multiple pages, providing a perfect way to prototype web and application interfaces. Each page contains unique settings for canvas size and color, image resolution, and guides. You set these options either on a per-page basis or globally across all pages in a document. Other than the Web Layer, each page also contains a unique set of layers. For common elements, however, you can use a master page or share layers across pages.

To share common design elements across pages:

- Start Fireworks and open a previously created design comp that was saved as a PNG.
- 2. Open the Layers panel (Window > Layers) to display it on the right side of the workspace.
- **3.** Click the eye icon to turn off visibility in layers that will not be shared across multiple layers. For example, any logos, navigation, and footer elements will remain on all prototype pages and should remain visible (**Figure 2**).
- Click the Pages tab to display the Pages panel (Window > Pages) (Figure 3).
- **5.** Select the current page in the Pages panel, and choose Set As Master Page from the panel Options menu.
- **6.** At the bottom of the Pages panel, click the Add Page button to a blank page. Add new pages until you have the number of pages shown in your design comp.

The new pages display the master page in the background.

- **7.** Double-click the new page names and rename them to appropriately describe their functions.
- **8.** Confirm that rulers and guides are visible. If they are not, select View > Rulers and View > Guides > Show Guides.

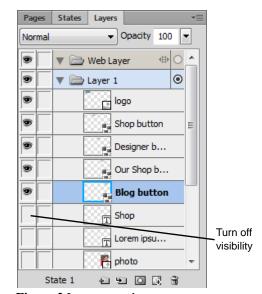


Figure 2 Layers panel

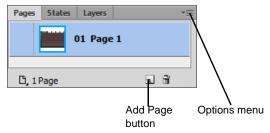


Figure 3 Pages panel

- 9. Select the master page in the Pages panel (Figure 4).
- **10.** Create a grid of guides that divide up the design comp into logical sections such as page header, logo area, navigation, main content areas, and footer (**Figure 5**).

Placing guides on the master page ensures they display across any shared pages in the layout.

To create a horizontal or vertical guide, drag from the corresponding ruler to the edge of an element in the content area.

Note: You can change the guide color to be more visible against different backgrounds. To change the guide color, select Edit > Preferences (Windows) or Fireworks > Preferences (Mac OS), and select the Guides And Grids category.

11. Confirm Smart Guides are visible and active by selecting View > Smart Guides, and then select Show Smart Guides and Snap To Smart Guides.

Note: *Smart Guides* are temporary snap-to guides that help you create, align, edit, and transform objects relative to other objects.

12. Select File > Save.

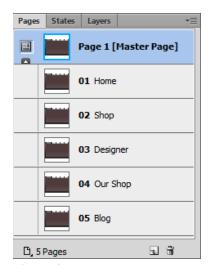


Figure 4 Pages panel, active page selected



Figure 5 Creating a guides grid in the master page

Workflow step 4

In the next few steps, you add unique design elements to individual pages.

You can use the HTML elements available in the HTML folder in the Common Library. The HTML folder contains HTML elements such as buttons, drop-down list objects, and text fields. You can edit the properties of these elements in the Symbol Properties panel. The HTML components include headings1-6 and link elements.

To add HTML elements to individual pages:

- 1. In the Pages panel, select a page (not the master page) to which you want to add unique elements.
- **2.** Open the Common Library panel (Window > Common Library) (**Figure 6**).
- **3.** Double-click the HTML folder (Windows) or click the HTML disclosure triangle (Mac OS) to display the selection of available components.

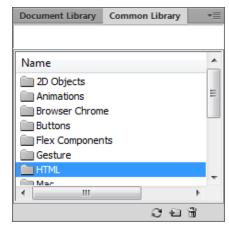


Figure 6 Common Library panel

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4. To use an HTML element, drag the component from the Common Library panel to the Fireworks canvas.

For example, you can drag the Heading 1 component from the Common Library and place it in the Heading area you defined by using guides in the previous section (**Figure 7**).

- **5.** On the canvas, select the component.
- **6.** In the Symbol Properties panel (Window > Symbol Properties), adjust parameters such as text, color, font, size, and other settings (**Figure 8**).

For example, you might format the Heading 1 component using the same parameters you set in the original design comp.

7. Continue adding HTML elements, text blocks, graphics, and images to the individual pages as needed. Use the Pages panel to navigate between pages. You can also copy and paste elements between pages.

The object here is to build out each of the individual pages to simulate the content of your fully functioning website.

8. Select File > Save when you have completed laying out the page-level content of your prototype.

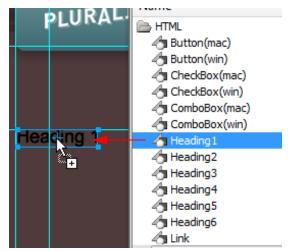


Figure 7 Drag a component from the Common Library



Figure 8 Symbol Properties panel

Workflow steps 5 and 6

You can design CSS-based layouts in a Fireworks document and then convert them to HTML pages with CSS rules that replicate your layouts. CSS-based layouts provide a standards-based approach and give a cross-browser friendly code. In this final section you export your finished interactive prototype as CSS-based HTML and images files.

Slices are the basic building blocks for creating interactivity in Fireworks. Slices are web objects that ultimately exist as HTML code. You can view, select, and rename them through the Web Layer in the Layers panel. Slicing cuts up a Fireworks document into smaller pieces and exports each piece as a separate file (**Figure 9**). When you select CSS and Images in the export step, Fireworks converts the layout into HTML and CSS code by using an export engine that analyzes the placement of the objects.

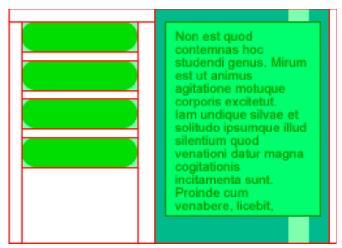


Figure 9 Slicing cuts a document into multiple pieces, which are exported as separate files

Slicing an image provides three major advantages:

- Optimizes images for fastest downloading.
- Adds interactivity so images can respond to mouse events.
- Eases updates for parts of web pages that frequently change (for example, photos and names on an employee-of-the-month page).

Observe a few rules while creating slices for CSS-based layouts to get expected results:

Rule 1: Use rectangles to export text and slices to export images. The export engine exports text placed in rectangles. Because only images that are covered by rectangular slices are exported, place slices on the images you want to export. These slices tell the export engine where the images are.

Rule 2: Avoid overlapping of objects. The export engine treats text, images, and rectangles as rectangular blocks. It examines the size and position of these objects to determine the logical rows and columns to place them in the layout. Carefully place the objects so their boundaries do not overlap.

Rule 3: Plan the layout for rows and columns. The export engine looks for logical partitions where a clear line of sight can be placed between objects or groups of objects. Enclose your column layouts in a rectangle to prevent the export engine from inserting a logical row that breaks the column layout.

Rule 4: Treat the document as two-dimensional. When you design your page, use rectangles to enclose objects that you want to treat as children of the rectangle. The export engine detects such export relationships. The export engine scans the child elements for logical rows and columns as in Rule 3.

In addition to these rules, observe the following:

- The export engine exports only primitive rectangles. To export the rounded corners of rectangles, place rectangular slices over them.
- To export the strokes of rectangles, place rectangular slices over rectangles that have them.
- To export symbols, place a rectangular slice over them.
- To export filters you have applied to text or rectangles, place rectangular slices over them.

To add navigation links and export a CSS layout:

- **1.** Select the master page in the Pages panel.
- 2. From the Tools panel, select the Slice tool and confirm the Show Slices And Hotspots button is selected (**Figure 10**).
- **3.** Using the guides for reference, draw a slice over a navigation element on the master page (**Figure 11**).
- **4.** Select the slice with the Pointer tool.
- **5.** In the Properties panel, set the Link to a page you previously defined by using the Pages panel.

For example, a slice has been drawn over the Shop shape, and the link set to Shop.htm (**Figure 12**). Because this slice is located on the master page, every page inherits the linked slice when the interactive prototype is exported.

- Continue adding slices and links to navigation elements as needed.
- 7. Add slices to the areas between the navigation elements and around the outside of the main body content areas (Figure 13).

You add page-level content slices in the next steps.

- **8.** Navigate to an individual page by selecting it in the Pages panel.
- **9.** Use the Slice tool and guides to create slices inside the main body content area not otherwise sliced up as part of the master page.

You may need to apply several slices to cover an entire layout. Take care not to overlap slices as you draw on the canvas.

10. Use the Pointer tool to select any slices in the layout that contain text you want to convert to HTML text.

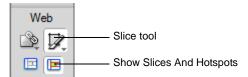


Figure 10 Tools panel

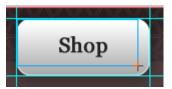


Figure 11 Draw a slice object

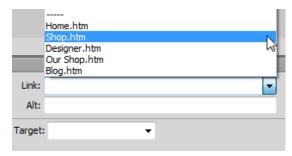


Figure 12 Set Link in the Properties panel



Figure 13 Slice up the master page.

11. With the slice object selected, select HTML from the Type pop-up menu in the Properties panel (**Figure 14**).

An HTML slice designates an area where ordinary HTML text appears in the browser that you may want to edit later in Dreamweaver (**Figure 15**).

- **12.** Continue adding slices until all the content areas of all the individual pages are covered.
- **13.** Choose File > Export.

The Export dialog box appears (**Figure 16**).

- **14.** From the Export pop-up menu, choose CSS and Images (.htm).
- 15. From the Pages pop-up menu, choose All Pages.
- **16.** Select the Put Images In Subfolder option in the Export dialog box.
- **17.** Click Options to set the HTML page properties.

 The HTML Setup dialog box appears (**Figure 17**).
- **18.** If you have a background image, click Browse to specify a background and set the tiling:
 - Select No Repeat to display the image only once.
 - Select Repeat to repeat, or tile, the image both horizontally and vertically.
 - Select Repeat-x to tile the image horizontally.
 - Select Repeat-y to tile the image vertically.
- **19.** Select the page alignment on the browser as left, center, or right.
- 20. Select the attachment scrolling as either fixed or scroll.
- **21.** Click OK to close the HTML Setup dialog box.
- **22.** Click Save (Windows) or Export (Mac OS).

The layout is exported to CSS and images HTML format.

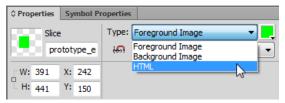


Figure 14 Properties panel

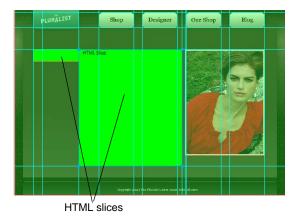


Figure 15 Layout slices

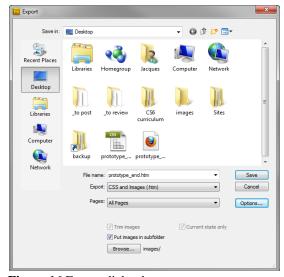


Figure 16 Export dialog box

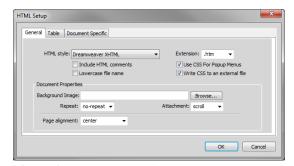


Figure 17 HTML Setup dialog box

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23. Navigate to the location of the saved files. Click on one of the HTML files and test that the prototype links work as expected (**Figure 18**).

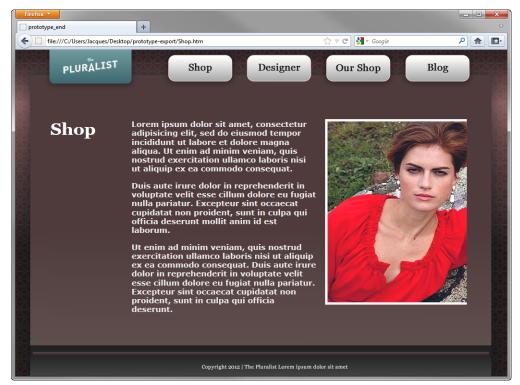


Figure 18 Fireworks prototype viewed in a web browser