

Website Interface

As an in-house designer for a multimedia services company, your job is to create the pieces that are required for a client's new home page. The basic site structure has already been designed; you need to make changes that were requested by the marketing manager, and then export the necessary pieces and information that is required for the HTML page to function properly.

This project incorporates the following skills:

- Working with color groups to unify the overall composition
- Using Live Color to edit vector elements
- Preparing page elements for export to use in a web page
- Defining cascading style sheets (CSS) to properly format various page elements in the final HTML file



Project Meeting

client comments

We are very happy with the overall site layout. There are just a few things we'd like to change.

The guitar illustration in the original comp was a bit overpowering; we like the idea, but can you darken the colors in that illustration a bit so that the logo stands out more?

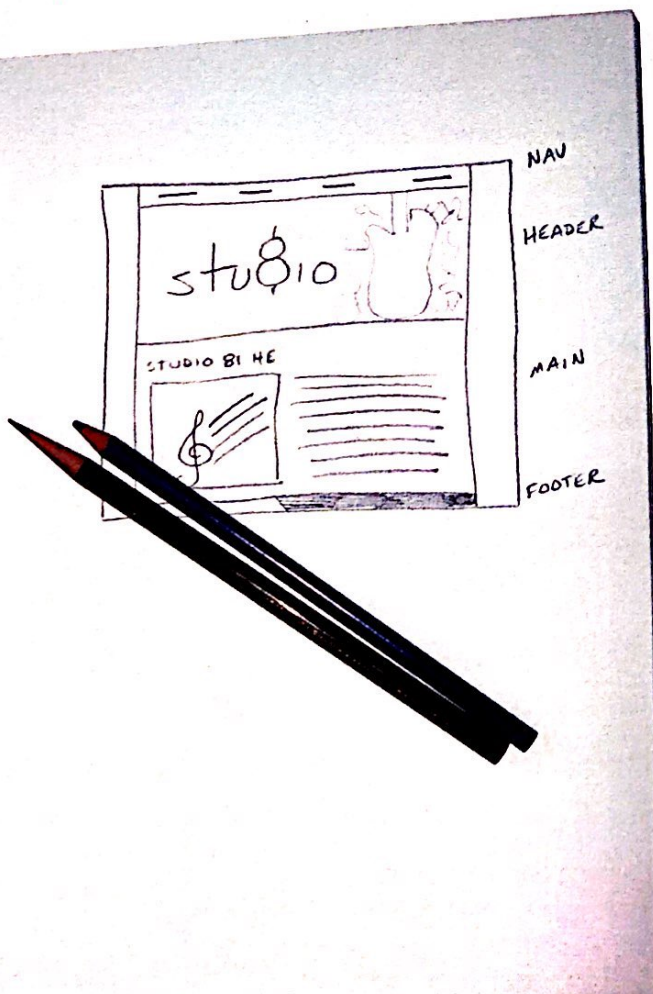
The blue color from the old site doesn't really work with the new illustration behind the navigation links. Can you change all the blue to something that works better with the guitar illustration?

Finally, can you change bottom-half of some of the squares in the focus illustration? We're aiming for something that looks like the digital bars on a mixing board, but we want all the pieces to work together better.

art director comments

Illustrator color groups should make it fairly easy to meet all three of the client's requests. You can use them to universally lighten the illustration, change blue objects to red in just a few clicks, and even cut apart squares and paint only certain areas of vector shapes.

While you're making the necessary aesthetic changes, I'll have the Dreamweaver developer start working on the web page code. By the time you get to that point, you will have an HTML page that you can use as a reference when you define names in Illustrator to create the necessary CSS and image files.



project objectives

To complete this project, you will:

- Create color groups to manage the color swatches in the file
- Adjust global color attributes in all selected artwork
- Adjust individual colors in a group to change all objects where the color is applied
- Work with Live Paint groups
- Explore HTML page code
- Examine the pixel grid
- Define object names to create CSS class selectors
- Create a gradient page background
- Define character styles to create CSS tag selectors
- Export CSS and image files

Stage 1 Using Color Groups and Live Color

As you should already know, you can use Illustrator to create virtually any type of illustration — from a basic vector drawing to a complex, realistic illustration. You can also use Illustrator to design an entire composition, whether a letterfold brochure that will be printed or a website interface that will be used as the map for an HTML page. In the first stage of this project, you are going to use color groups and Live Color to adjust global and specific colors to unify various elements of the existing site design.

USE A COLOR GROUP TO CHANGE MULTIPLE SWATCHES

Color groups are useful for organizing color swatches into logical and manageable collections. You can make changes that affect all colors within a group; this takes the concept of global color swatches one step further. In this exercise, you create a group from the tracing object swatches, so you can make changes that affect the entire illustration.

1. Download **Studio_AI18_RF.zip** from the Student Files web page.
2. Expand the ZIP archive in your **WIP** folder (Macintosh) or copy the archive contents into your **WIP** folder (Windows).

This results in a folder named **Studio**, which contains the files you need for this project. You should also use this folder to save the files you create in this project.

3. Open the file **site-design.ai** from the **WIP>Studio** folder.
4. In the **Layers** panel, expand all five layers and review the various elements.

The basic site layout follows a structure that is fairly common in website design. Four layers — **Navigation**, **Header**, **Main**, and **Footer** — represent the various sections of a basic HTML page. A fifth layer, named **Background**, contains a single path with a solid gray fill — representing the background color of the entire page.

Note:

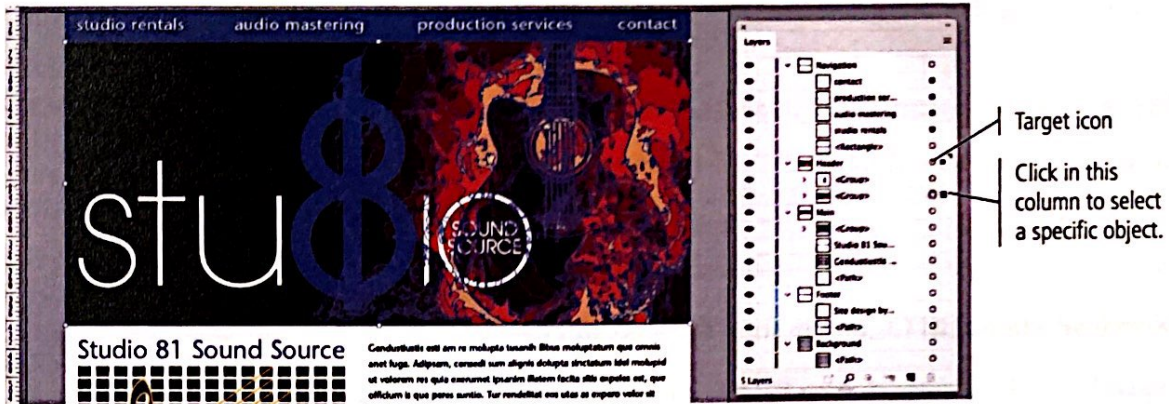
As you work through the exercises in this project, the importance of the structure used in this file will become apparent.



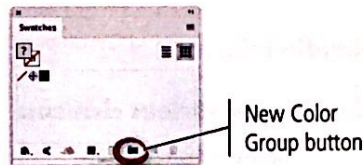
- In the Layers panel, click to the right of the Target icon to select the bottom group on the Header layer.

Remember: Clicking in this area reveals the Indicates Selected Art icon.

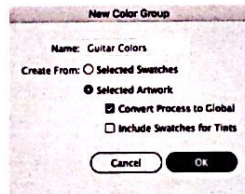
The selected group was created by applying the Image Trace function to a photograph of a flaming guitar; this results in a group of vector objects that can each be selected and manipulated individually to achieve the designer goal.



- With the group selected, click the New Color Group button at the bottom of the Swatches panel.

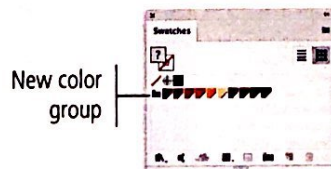


- In the resulting dialog box, type **Guitar Colors** in the Name field. Choose the **Create From Selected Artwork** radio button, check the **Convert Process to Global** option, and turn off the **Include Swatches for Tints** option.



- Click OK to create the new color group.

By checking the Selected Artwork option, every color used in the selection is added as a separate swatch in the group. Each is a global swatch, which means editing the swatch will affect the appearance of any object where that swatch is applied.



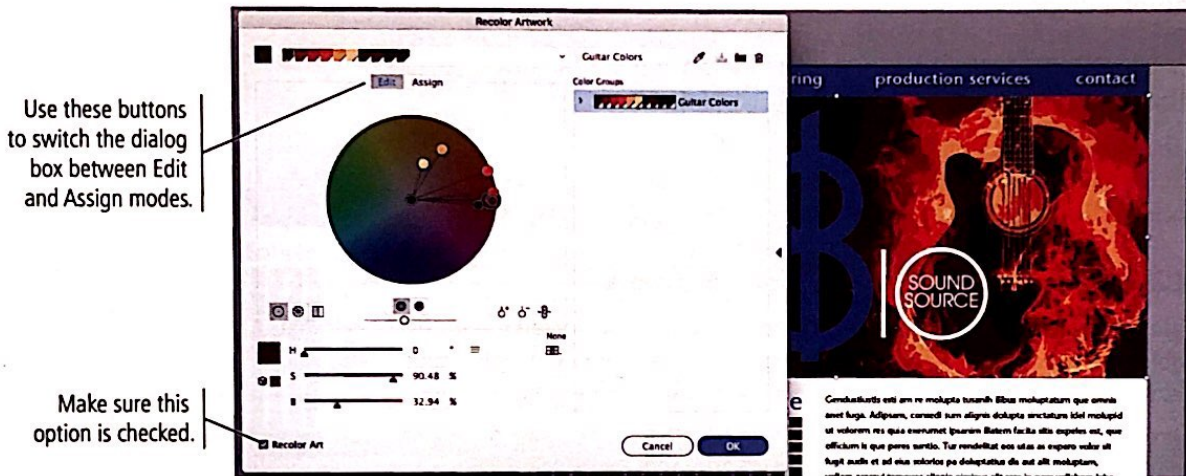
- With the artwork still selected, click the color group folder icon to select the entire group.

If you click a swatch instead of the group folder, you will change the fill/stroke attribute (whichever is active) of the selected objects.

10. Click the Edit or Apply Color Group button at the bottom of the Swatches panel.



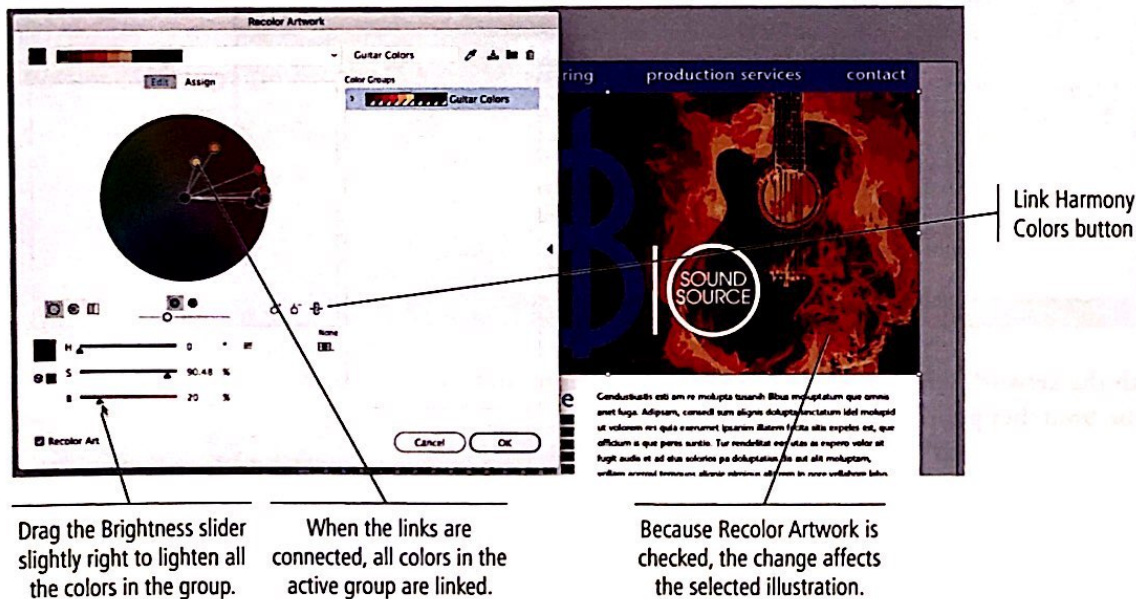
11. Change the Recolor Artwork dialog box to Edit mode, and make sure the Recolor Art option is checked in the bottom-left corner.



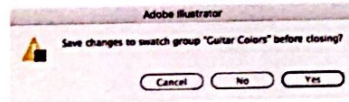
12. Make sure the Link Harmony Colors button is active. Drag the Brightness slider (below the color wheel) slightly right to lighten all colors in the image.

The Link Harmony Colors button is a toggle. When it is already active, the tool tip for the button shows "Unlink Harmony Colors" (and vice versa).

- Harmony colors are unlinked
- Harmony colors are linked



13. Click OK to apply the change. Click Yes when asked if you want to save the changes to the color group.



14. Save the file and continue to the next exercise.

USE A COLOR GROUP TO MANAGE FILE COLORS

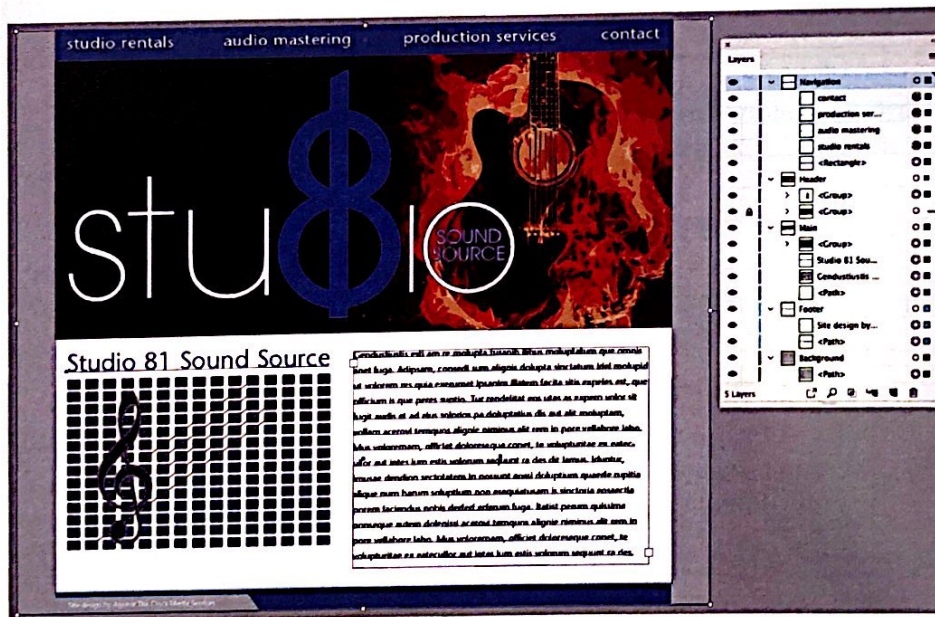
In addition to managing universal changes to all swatches in a group, color groups can also be useful for simplifying a design and managing the individual colors included in specific areas of a file. In this exercise, you use a color group to combine similar colors into tints of a single color swatch.

1. With `site-design.ai` open, use the Layers panel to lock the guitar illustration group.

The blue accent color in the rest of the site elements does not suit the predominant reds in the guitar illustration. You are going to use another color group to manage the site colors, changing the blue to a red color that better suits the new main image.

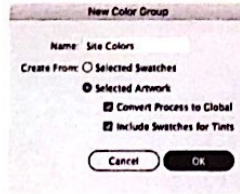
2. Choose `Select > All` to select all unlocked artwork.

The color group you create in the next few steps will only include colors in the selected objects. Because the guitar-illustration group is locked, you can't select that group; colors in that illustration will not be included in the second color group.



3. With the artwork selected, click the New Color Group button at the bottom of the Swatches panel.

- In the resulting dialog box, type **Site Colors** in the Name field. Choose the **Create From Selected Artwork** radio button, and make sure both check boxes are selected.



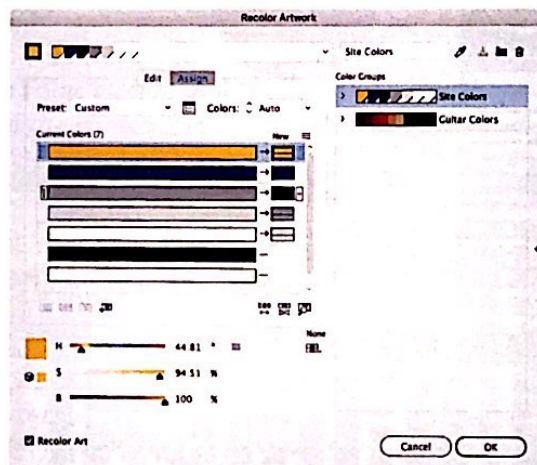
- Click **OK** to create the new color group.



- With the artwork still selected, click the **Site Colors** color group folder to select the entire group, and then click the **Edit** or **Apply Color Group** button.

This group currently contains seven colors, four of which are tints of black. It will be easier to manage the group if you combine the different gray swatches into tints of a single black swatch.

- If necessary, change the **Recolor Artwork** dialog box to **Assign** mode.

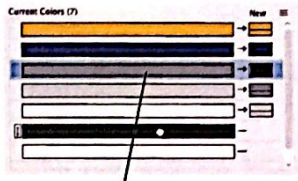


Note:

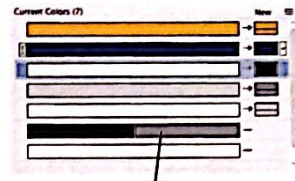
*Unchecking the **Include Swatches for Tints** option does not solve this problem because the artwork was not created with tints of a swatch.*

8. Click the third color in the list of current colors and drag it into the black row.

Basic black and white appear at the bottom of the list, and do not have a swatch in the "New" column. You are using the Assign dialog box to convert the other shades of gray (including the white in the top half of the list) into shades of the default Black swatch.

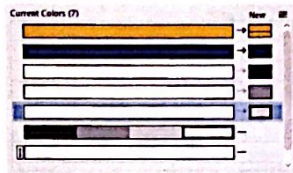


Click the first gray bar and drag it onto the black bar.



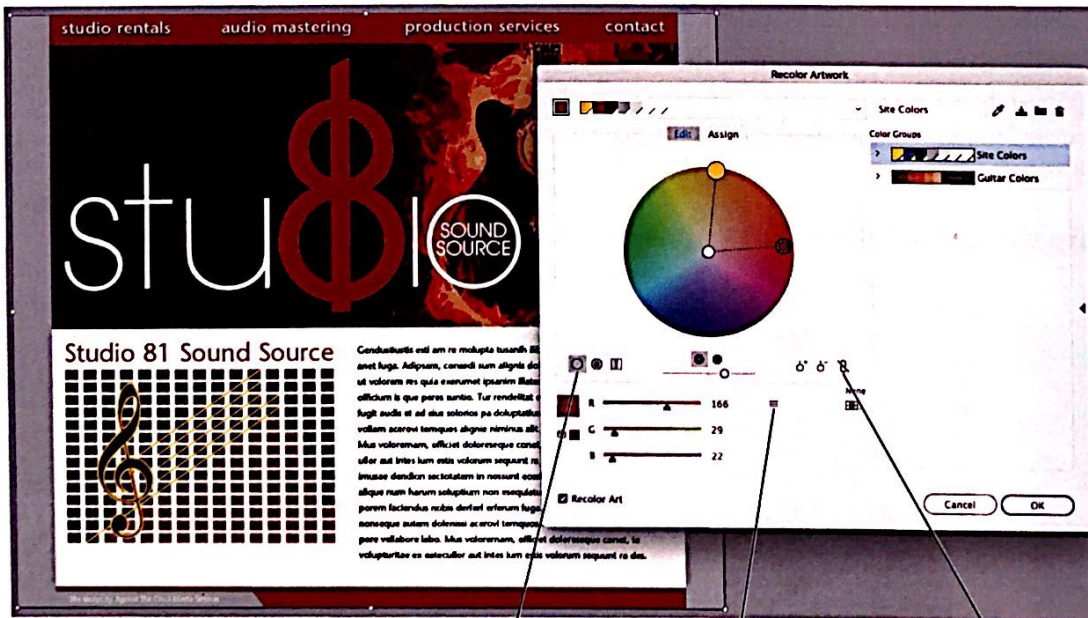
After releasing the mouse button, the Current Colors area shows that two original colors will result in a single new color.

9. Repeat Step 8 to combine the other gray shade and the white swatch above the black one into the black color.



10. Display the Recolor Artwork dialog box in Edit mode, and then show the Smooth Color Wheel. Below the color wheel, click the Unlink Harmony Colors button to disconnect the color spokes from one another.

11. Select the blue color spoke. In the bottom area of the dialog box, display the color sliders in RGB mode and then define the spoke to be R=166 G=29 B=22.

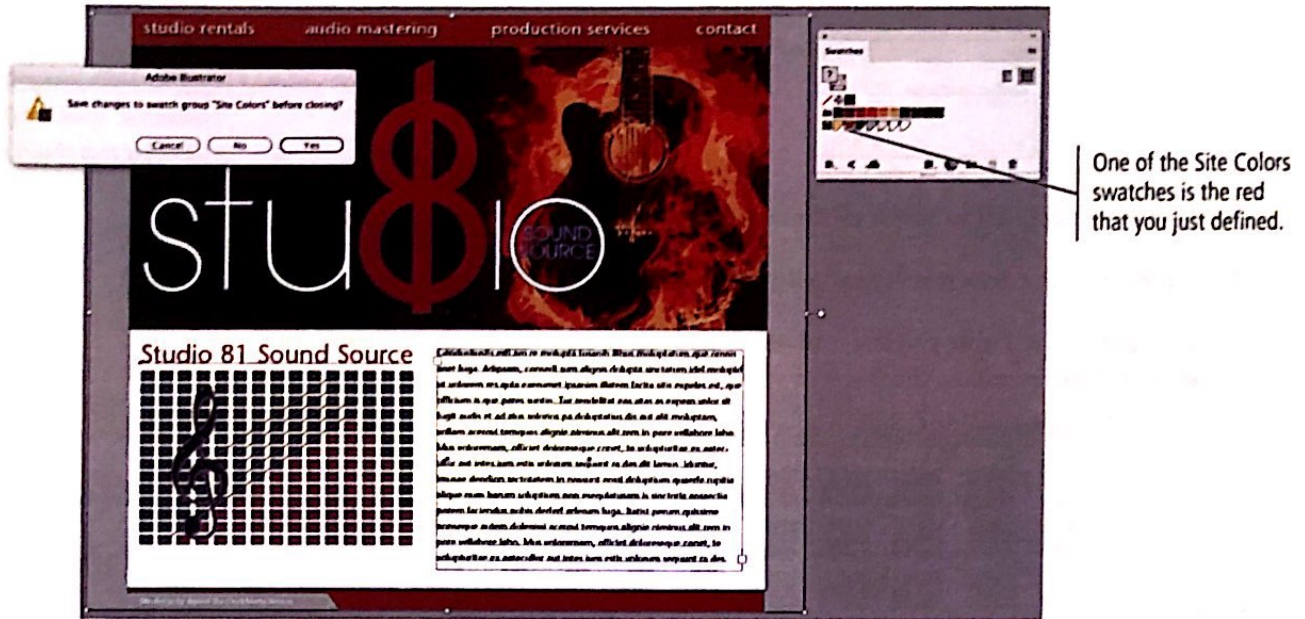


Click this button to display the smooth color wheel.

Use this menu to view the color sliders in a different color mode (RGB, CMYK, etc.).

When this icon is a broken chain, you can change one color independently of other colors in the group.

- Click OK to change the color group, and click Yes when asked if you want to save changes to the current group.



- Save the file and continue to the next exercise.

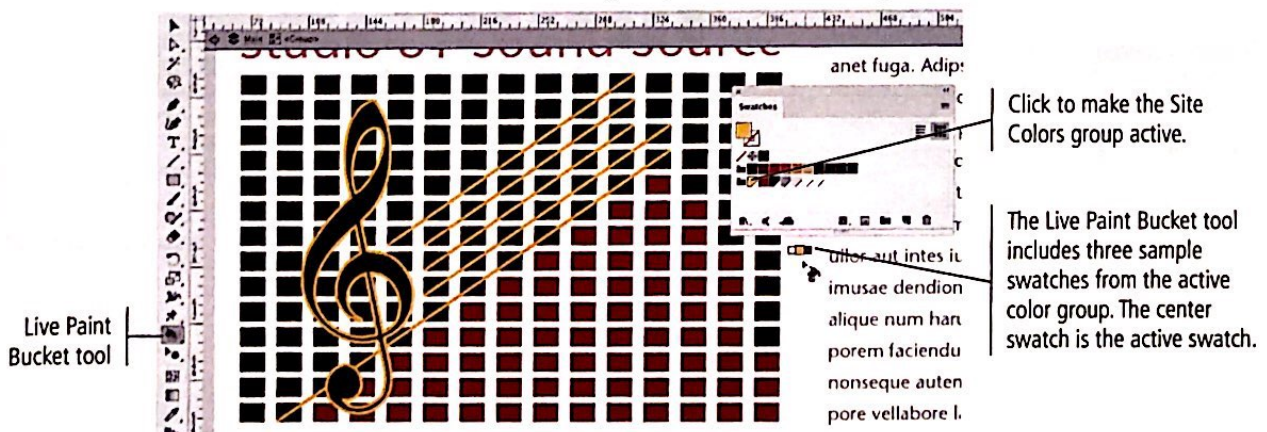
WORK WITH LIVE PAINT GROUPS

A Live Paint Group is a special type of Illustrator group. Using the Live Paint Bucket tool, you can navigate through various swatches in a color group and apply those colors to different areas of the selected group. The advantage to this type of group is that fills are not necessarily defined by object edges. Rather, Illustrator identifies overlapping areas and allows you to treat the separate areas as distinct objects, even though they are part of the same vector shape.

- With `site-design.ai` open, deselect everything in the file.
- Using the Selection tool, double-click the artwork below the “Studio 81 Sound Source” subheading to enter into Isolation mode.

Working in Isolation mode makes it easier to work with a specific group without affecting other objects on the artboard.

- Choose the Live Paint Bucket tool (nested under the Shape Builder tool), and then click one of the swatches in the Site Colors group in the Swatches panel.



- Press the Right Arrow key until the red swatch in the Site Colors group appears selected in the tool cursor.

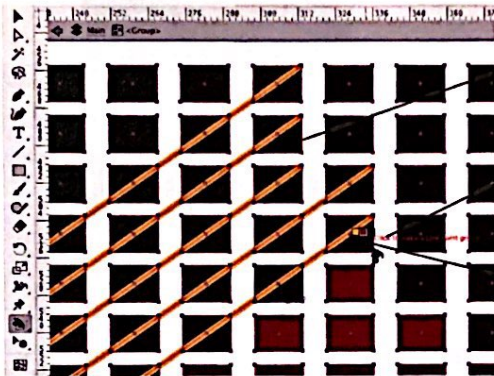


The Left and Right Arrow keys navigate between the swatches in the active color group.

Note:

If no color group is selected, the Live Paint Bucket tool shows the default ungrouped swatches.

- Choose Select>All to select all elements of the artwork in the group.
- Zoom into the area where the yellow lines bisect the black squares.
- Using the Live Paint Bucket tool, click the lower part of the last black square that intersects the bottom yellow line.

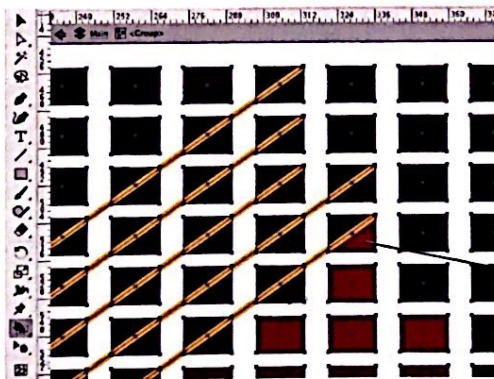


You can see the vector paths of overlapping shapes in the selection.

Before you click the group, cursor feedback provides helpful tips.

Use the point of the cursor arrow to identify the object you want to fill with the tool.

The Live Paint Bucket tool identifies divisions in the selected artwork, even though they are not technically divisions.

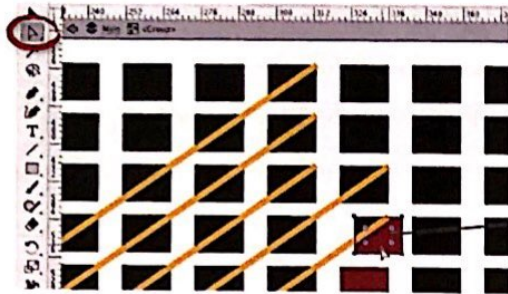


The Live Paint Bucket tool identifies divisions based on all objects in the group.

- Using the Direct Selection tool, click away from the active group to deselect it, and then click only the object you filled with the red swatch.

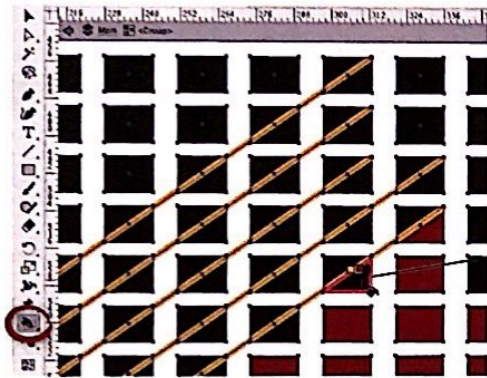
9. Click the selected object and drag right.

Moving objects that are part of a Live Paint group is different than moving individual objects in a regular vector group. Illustrator recognizes the original placement of the fill color, almost as if there is an underlay of the fill color, and the “filled” object is revealing that area of the color. Moving the individual object changes which part of the color “underlay” is visible.



After you move the object, a different area of the red fill is visible.

- 10. Choose Edit>Undo Move to reposition the object that you moved in Step 9.
- 11. Using the Selection tool, select the entire group again.
- 12. Using the Live Paint Bucket tool, fill the bottom half of each square that is bisected by a yellow line.



Because the selection is already a Live Paint group, a heavy border outlines the shape that will be affected if you click.

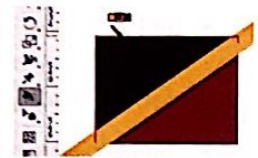
13. Deselect the logo artwork, then press the ESC key to exit Isolation mode.



14. Save the file and continue to the next stage of the project.

Note:

When working with the Live Paint Bucket tool, press Shift to paint the stroke of an object instead of the fill.



Note:

Use the Live Paint Selection tool to select pieces of a Live Paint group.



Stage 2 Creating Website Graphics

It is common practice to create the look and feel of a website in Illustrator, and then hand off the pieces for a programmer to assemble in a web-design application such as Adobe Dreamweaver. In the second half of this project, you complete a number of tasks to create the necessary pieces for the final website, including the different styles that will be used to properly format various elements in the resulting HTML page.

This site is a very simple example, using only a few page elements to illustrate the process of properly mapping Illustrator objects to create the pieces that are necessary in an HTML page; we kept the site design basic to minimize the amount of repetition required to complete the project. The skills and concepts you complete in this project would apply equally to more complex sites.



EXAMINE AN HTML PAGE

You do not need to be a web programmer to design a site in Illustrator. However to take best advantage of some of the tools that are available for moving your work into a functional HTML page, you should understand at least the basics of HTML:

- An HTML page contains code that defines the **elements** that make up a page.
- Individual page elements are defined with **tags**. For example, a `<div>` tag identifies a division or area of the page, and a `<p>` tag identifies a paragraph of text. Available tags are defined by the version of HTML being used; you can't simply make up tags.
- HTML5, the most current version of the language, adds new structural elements for common layout practices, such as `<header>`, `<nav>`, and `<footer>` for the header, navigation, and footer sections of a page (respectively).
- Specific elements can be identified with user-defined classes, which helps to differentiate them from other same-type elements. For example:

```
<div class="feature-image">  
<div class="text-area">
```

- Cascading Style Sheets (CSS) are used to define the properties of HTML elements. CSS files define **selectors**, which contain **property:value pairs** to control the appearance of specific elements in an HTML page. For example:

```
header {  
  width: 780px;  
  height: 75px;  
}
```

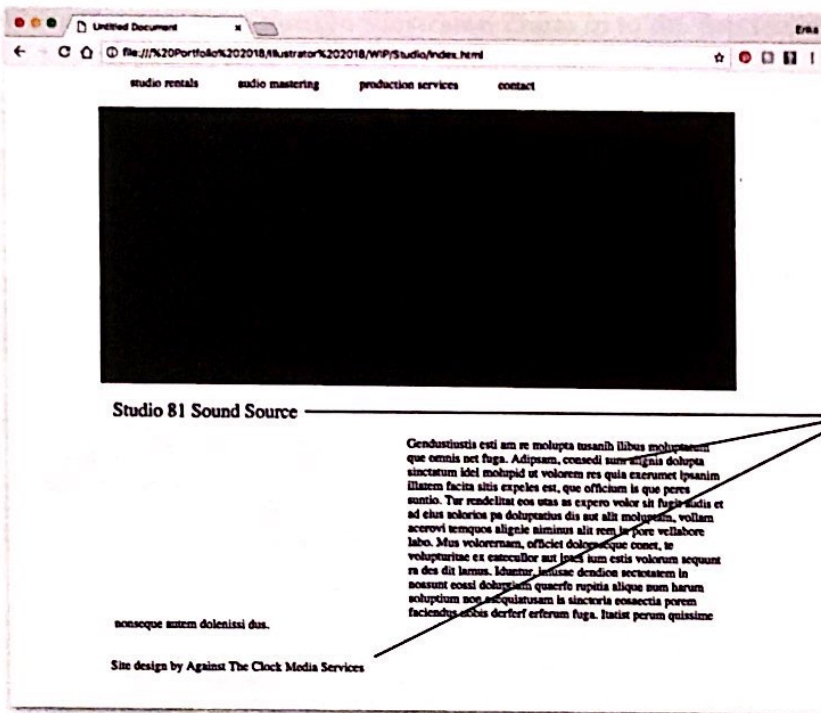
- Two types of CSS selectors are relevant to site design in Illustrator:
 - **Tag selectors** define the appearance of HTML tags. These selectors simply use the same tag name as the selector name; for example, the `div` selector defines the appearance of all `<div>` tags.
 - **Class selectors** define the appearance of any tag that is identified with the defined class. These selector names always begin with a period; for example, the `.text-area` selector would apply to any element that has the `class="text-area"` attribute.

Note:

This is hardly an exhaustive explanation of HTML and CSS; we focus here on only the issues you should understand when working with Illustrator to create a website layout. To learn more about HTML tags and CSS selectors, we recommend Adobe Dreamweaver CC: The Professional Portfolio (the companion book to this one).

1. Open the file index.html (from your WIP>Studio folder) in a browser window. If possible, use the Google Chrome or Opera browser.

This HTML page contains a number of elements including links to images that don't yet exist. You will create those images from your Illustrator file. You will also use existing objects in the Illustrator file to define background images and text formatting for various HTML elements so that the HTML page more closely resembles the Illustrator file.



Note:

You might see different results depending on which browser you use. The important point is that very little has yet been done to format the various page elements.

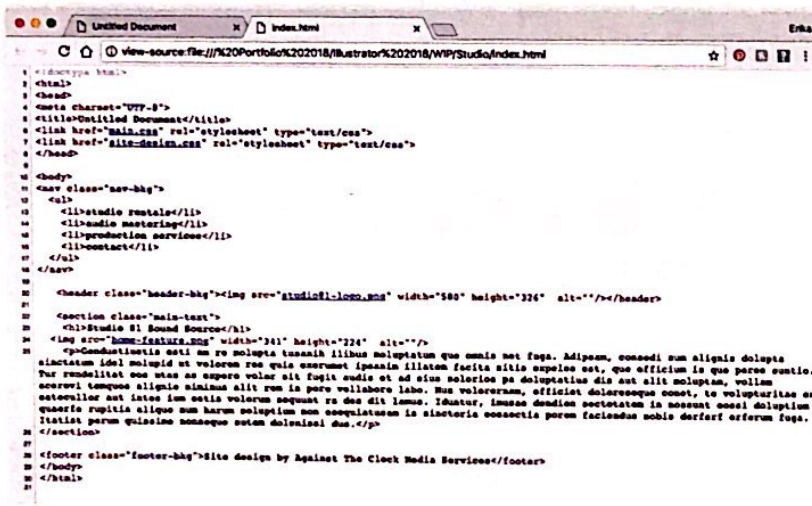
2. If possible, open the page source code.

Using the Chrome browser, you can choose `View>Developer>View Source`.
Using the Opera Browser, you can choose `View>Developer Tools>Source`.

You can also open the HTML file in Adobe Dreamweaver, Edge Code, or another HTML editor application.

Note:

If you cannot access the page code, use our screen shot and the following explanation as a guide.



The top of the code shows the <head> tag, which contains two link elements (lines 6 and 7 in our example). Each link element refers to a different CSS file.

- The first link, **main.css**, was created by the person who created the HTML code; selectors in that file define the size and position of various elements, which you saw in Step 1.
- You will create the second link, **site-design.css**, from the Illustrator file that you have been using in this project.

```
1 <head>
2 <meta charset="UTF-8">
3 <title>Untitled Document</title>
4 <link href="main.css" rel="stylesheet" type="text/css">
5 <link href="site-design.css" rel="stylesheet" type="text/css">
6 </head>
```

The **body** element, defined by opening <body> and closing </body> tags (Lines 10 and 29), contains all elements that are visible in the browser window.

Lines 11–18 define the **nav** element, which is further identified by the **class="nav-bkg"** attribute. Inside the opening <nav> and closing </nav> tags, an unordered list contains the text of each navigation link.

```
10 <body>
11 <nav class="nav-bkg">
12 <ul>
13 <li>studio rentals</li>
14 <li>audio mastering</li>
15 <li>production services</li>
16 <li>contact</li>
17 </ul>
18 </nav>
```

Line 20 defines the **header** element. The code for this element includes a nested image element (using the tag); the src attribute (**src="studio81-logo.png"**) defines the file name of the image that should appear in this element.

```
19 <header class="header-bkg"></header>
```

Lines 22–26 define a **section** element, which is further identified by the **class="main-text"** attribute. It contains an image element with the **src="home-feature.png"** attribute, and text content that is identified as heading 1 (<h1>) and paragraph (<p>) elements.

```
22 <section class="main-text">
23 <h1>Studio 81 Sound Source</h1>
24 
25 <p>Gendustiuustis esti an re molupta tessnib libus moluptatum que omnis net fuga. Adipsam, consemi
26 sum allignis dolupte sinctatum idoi molupid ut volorem res quia exorimet ipsanin illatem facita sitis
27 expeles est, que officium is que peres suntio. Tur rendelitat eos utas as expero volor sit fugit audis
28 et ad eius solorios pa doluptatius dis aut alit moluptam, vullan acerovi temquos allignie nimirus alit
29 rem in pore vellabors labo. Mus volozernam, officiet doloresseque conet, te volupturitas ex esteucullor
30 aut intes ium estis volorum sequant ra des dit lamus. Iduntur, imusse dendion sectotatem in nosunt
31 eocsi doluptium quserie rupitit aliquo num harum soluptium non esequiatusan is sinctoria essectia porum
32 faciendus nobis derferi erferum fuje. Itatist perum quissimo nonseque autem dolenissi dus.</p>
33 </section>
```

Line 28 defines the **footer** element with the **class="footer-bkg"** attribute.

```
28 <footer class="footer-bkg">Site design by Against The Clock Media Services</footer>
29 </body>
```

Note:

Line 3, <head>, is called an **opening tag**; it represents the beginning of the element.

Line 8, </head>, is called a **closing tag**; it represents the end of the element.

3. Close the browser and return to Illustrator.

4. Continue to the next exercise.

EXAMINE THE PIXEL GRID

When you export images for a website interface, vector objects will be converted to raster files so that they display properly on screen. As you learned at the beginning of this book, raster objects are composed of pixels. Illustrator includes a number of tools for making sure you achieve the best possible quality in the output raster files.

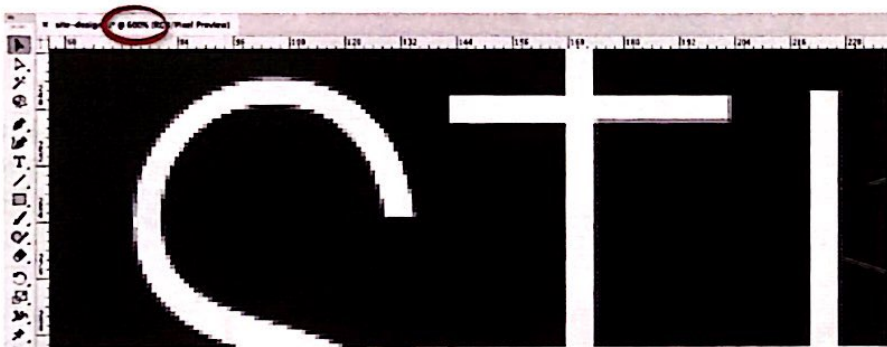
1. With `site-design.ai` open in Illustrator. Zoom in to the first letters of the logo in the header area.
2. With the view percentage at least 600%, choose `View>Pixel Preview`.

This option shows the pixel grid that will be used when the artwork is converted to raster images. The grid represents 72-ppi resolution; each square is $1/72$ of an inch.

Objects are obviously bitmapped because you are viewing at such a high view percentage. However, you can see how the edges of shapes are defined by the position of pixels in the grid. This is an accurate representation of the pixel content that will exist in the final exported images.

Note:

The pixel grid appears at 600% or higher view percentage.



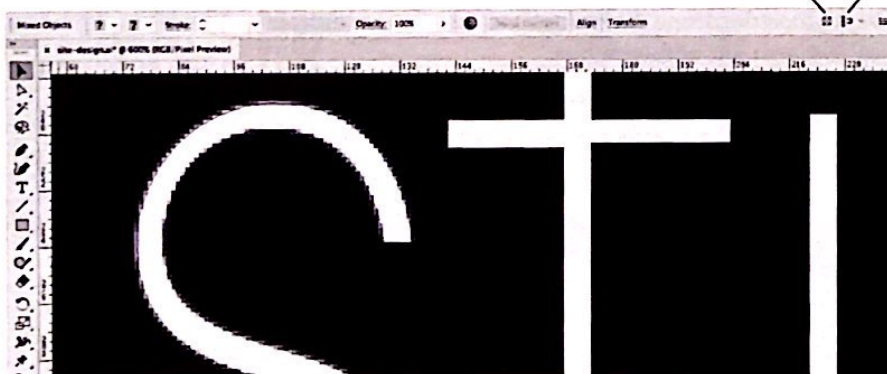
The grid shows the $1/72$ -inch pattern for rasterization.

You can see the anti-aliasing that results if paths are not aligned to the pixel grid.

3. Make the Selection tool active, and then choose `Select>All`.
4. Click the `Align Selected Art to Pixel Grid` button in the `Application/Menu` bar.

When objects align to the pixel grid, straight lines reproduce more sharply because they no longer require anti-aliasing to fill the pixel grid. The shift in position is very, very slight — but it can make a significant difference in the sharpness of exported raster images and small type objects.

Align Selected Art to Pixel Grid Align Art to Pixel Grid on Creation and Transformation



Note:

You can toggle on the `Align Art to Pixel Grid on Creation and Transformation` to automatically create “pixel-perfect” art when it is first drawn.

5. Choose `View>Fit Artboard In Window`, and choose `View>Pixel Preview` to turn off this option.
6. Deselect everything in the file, save it, and continue to the next exercise.

If you click the arrow to the right of that button, you can determine exactly which actions cause objects to snap to the grid.

DEFINE OBJECT NAMES

When you export CSS from Illustrator, object names in the Layers panel determine the resulting selector and file names. The first step in completing this stage of the project is to define object names that match the class names in the HTML file, as well as the file names of images that will be exported.

As you complete the following exercises, make sure you use the exact names we define in the steps. If you use different object and file names — including misspellings or different capitalization — the final CSS code will not function properly.

1. With `site-design.ai` open, expand all layers in the Layers panel (if necessary). Unlock the locked group on the Header layer.

2. Click to select the red-filled rectangle at the top of the page.

3. Open the CSS Properties panel and review the lower half of the panel.

The selected object is a live shape, recognized by Illustrator as a `<Rectangle>`. Illustrator does not automatically generate CSS from live shapes.



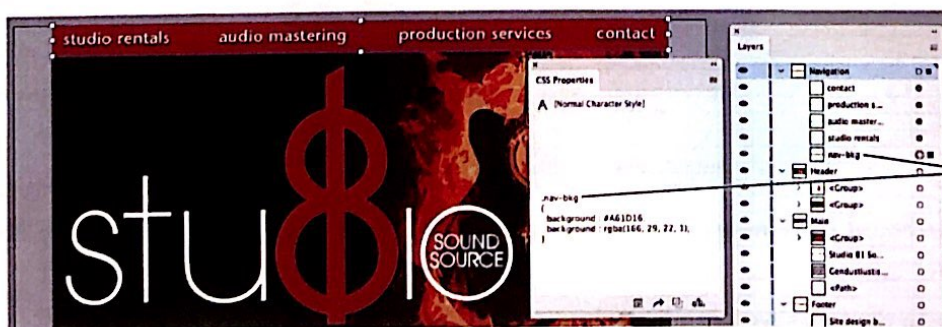
4. In the Layers panel, double-click the selected `<Rectangle>` name.

5. Type `nav-bkg`, then press `Return/Enter` to finalize the new object name.

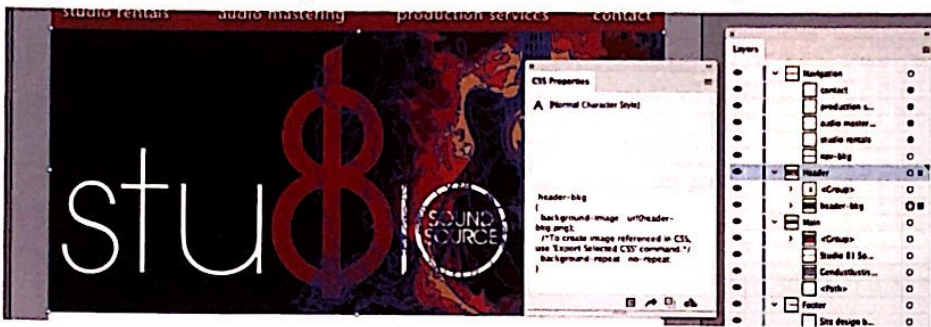
The CSS Properties panel now shows the `.nav-bkg` selector name — the same as the object name you just defined. This also matches the class that is defined for the nav element in the HTML code.

When you export the CSS file later in this project, this selector will define a red background color. Two different properties define the background color so that different browsers will be able to interpret at least one of these values.

- `#A61D16` is the hexadecimal color value for the red background color.
- `rgba(166, 29, 22, 1)` defines color based on four values — red, green, blue, and alpha transparency.



- Click to select the guitar illustration. In the Layers panel, double-click the selected <Group> name in the Layers panel.
- Type `header-bkg`, then press Return/Enter to finalize the object name.



In this case, you are defining both the class name and the name of the raster image that will be generated from the selected artwork.

The Properties panel shows that the `.header-bkg` class defines two properties:

- background-image** : `url(header-bkg.png)` defines the image that will be placed in the background of any element that is identified by the `header-bkg` class.
- background-repeat** : `no-repeat` says that the defined background image will appear only once in the element.

The CSS Properties panel also includes an important note reminding you that the referenced image must be exported as well as the CSS file. You will accomplish this later in the project.

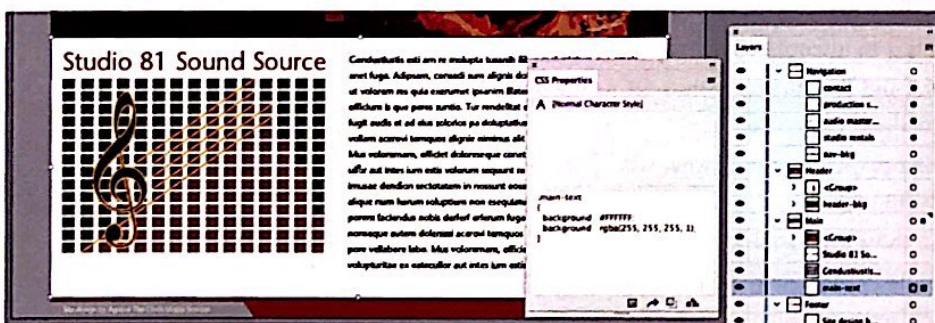
Note:

If you select an object that is filled with a pattern swatch, the CSS would not define a background-repeat property. This allows the background image to repeat (tile) horizontally and vertically to fill the containing element.

- Repeat Steps 6–7 to rename the white-filled path object (behind the secondary logo artwork and text) as `main-text`.

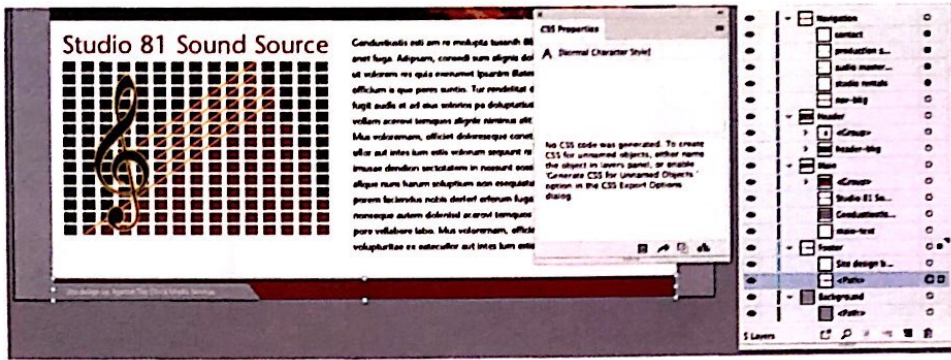
The object in this section has the default name <Path>, which means it is not recognized as a live shape. The default CSS class selector for this object uses a default generic name. You need to change the object name — and thus, the selector name — so that it matches the class that is defined for the <section> tag in the HTML code.

This object represents the background behind the primary content area. In the HTML code, the section element is identified with the `.main-text` class, so you are using the same text as the object name.



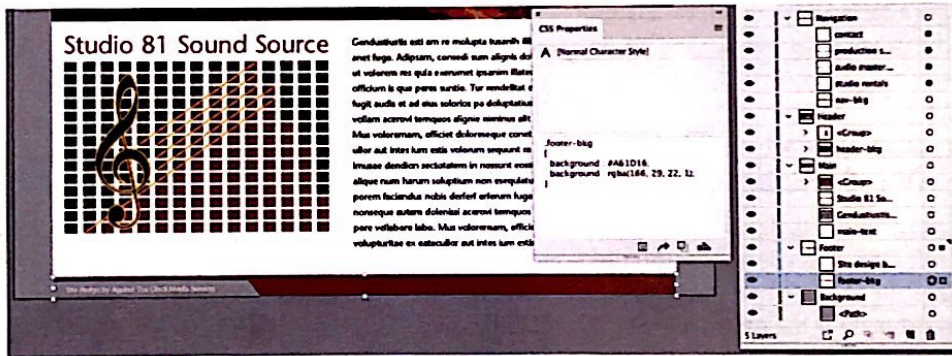
9. Select the red-filled shape at the bottom of the page.

In the CSS Properties panel, you see a message that “No CSS code was generated...” for this object. Because it is an irregular shape, Illustrator has difficulty determining what to do.



10. In the Layers panel, rename the selected object as footer-bkg.

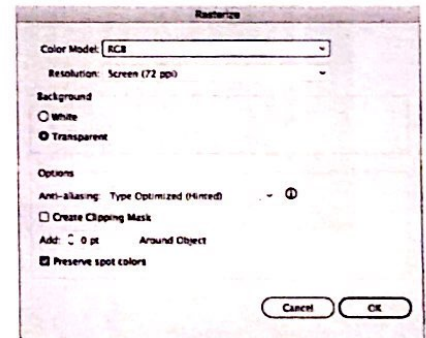
The CSS Properties panel now shows two properties that define a background color for the element. Unfortunately, there is no code that defines the irregular shape; if you leave the object and code as they are now, the resulting CSS would display the entire element background color as red. To solve this problem, you need to convert the irregular shape to a raster object that will serve as the element’s background image instead of a solid background color.



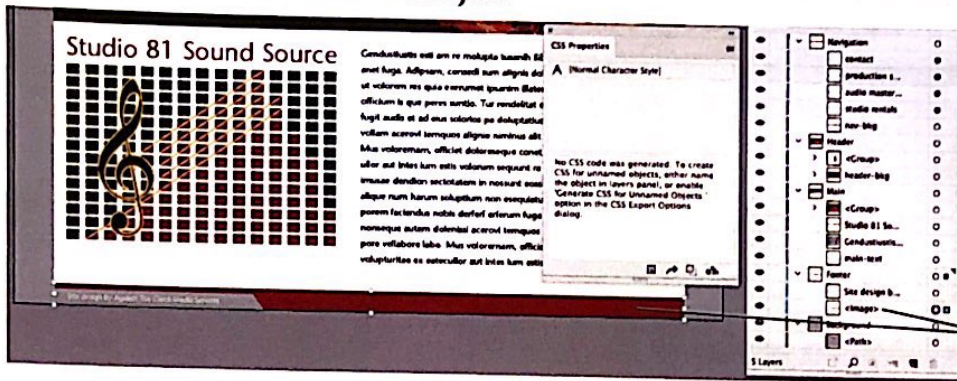
11. With the red-filled object selected, choose Object>Rasterize. In the resulting dialog box, choose Screen (72 ppi) in the Resolution menu and select the Transparent Background radio button.

You can use this dialog box to intentionally rasterize a vector object in an Illustrator file.

- The **Color Model** and **Resolution** menus define the settings that will be used in the resulting raster object.
- The **Background** options determine what will appear in unfilled areas of the selected bounding box.
 - White fills in those areas so underlying objects will not be visible.
 - Transparent allows unfilled areas in the selection to show underlying objects.
- The **Anti-Aliasing** menu can be used to help minimize blurry edges in the resulting raster object.
- The **Create Clipping Mask** can be used to add a vector-based clipping object over the resulting raster object.
- **Add _ Around Object** adds a defined number of pixels around all four edges of the resulting raster image.
- **Preserve Spot Colors** maintains spot-color information as a separate channel in the resulting raster object.

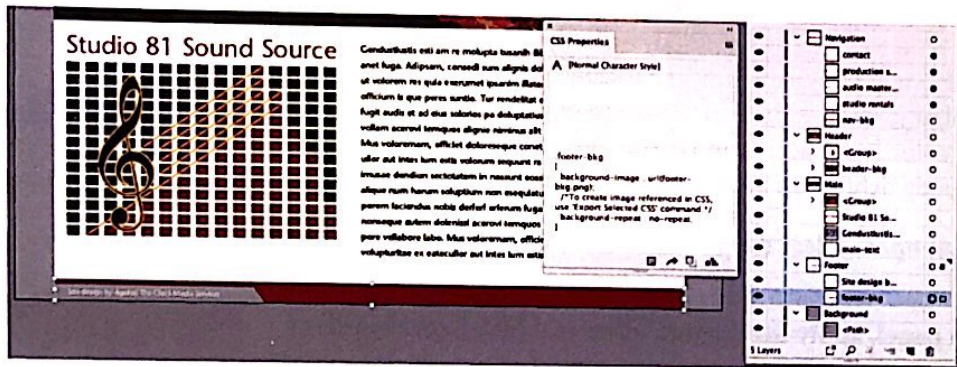


12. Click OK to rasterize the selected object.



13. In the Layers panel, change the name of the object to footer-bkg.

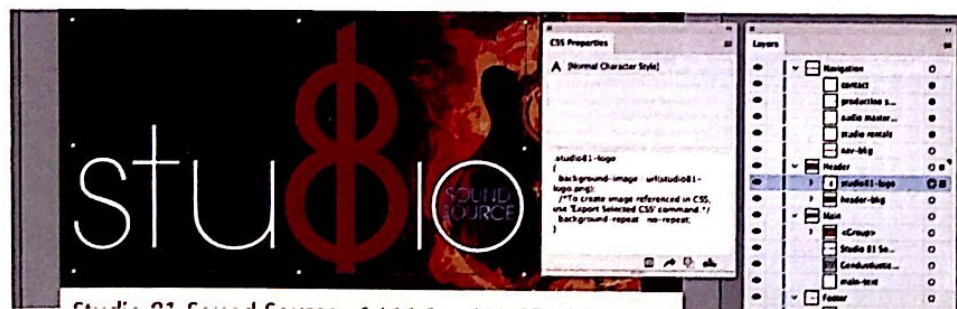
After renaming the object, the CSS Properties panel now shows the code that will be generated for this class.



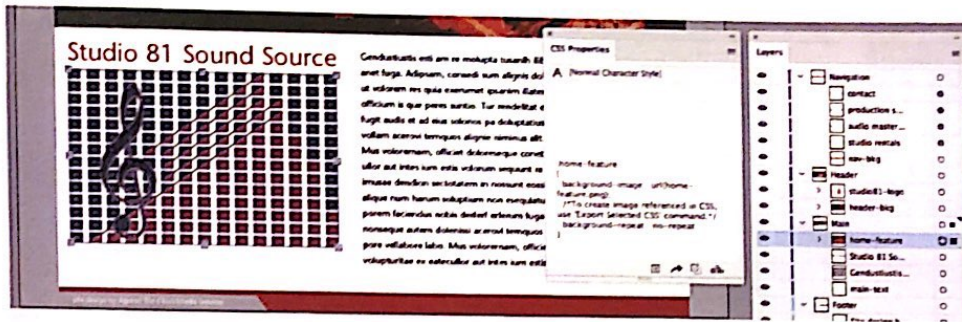
14. Click to select the logotype in the header area of the layout. In the Layers panel, change the selected <Group> name to studio81-logo.

The tag src attribute in the header element calls for the file **studio81-logo.png**. The name you define in the Layers panel is the file name that will be used when the image is generated during the export process. You do not need to include the file extension in the object name; that will be added for you when the images are exported.

As you can see in the CSS Properties panel, a class will be created for this object. Although you don't need this class, you do need the image file that will be created. The extraneous class will not affect the HTML page because that class has not been applied to any of the HTML elements on the page.



- Repeat Step 14 to rename the artwork to the left of the text block as **home-feature**.



- Save the file and continue to the next exercise.

CREATE A GRADIENT PAGE BACKGROUND

The HTML body element — contained by the `<body></body>` tags — defines everything that will be visible in a browser window. Basically, you might think of the body element as the overall page background. In this exercise, you are going to change the solid-gray background color to a gradient and define the object name so that the resulting CSS selector properly defines the appearance of the page background.

- With `site-design.ai` open, select the gray-filled object on the Background layer.
- Using the Gradient panel, apply the default white-to-black linear gradient and define a -90° angle.
- Drag the yellow swatch from the Site Colors group in the Swatches panel onto the left gradient stop on the gradient ramp.



The `<path>` object on the background layer is selected.

Drag the yellow swatch from the Site Colors group to the left gradient stop.

4. Drag the red swatch from the Site Colors group in the Swatches panel onto the gradient ramp in the Gradient panel. Define the stop's Location as 50%.



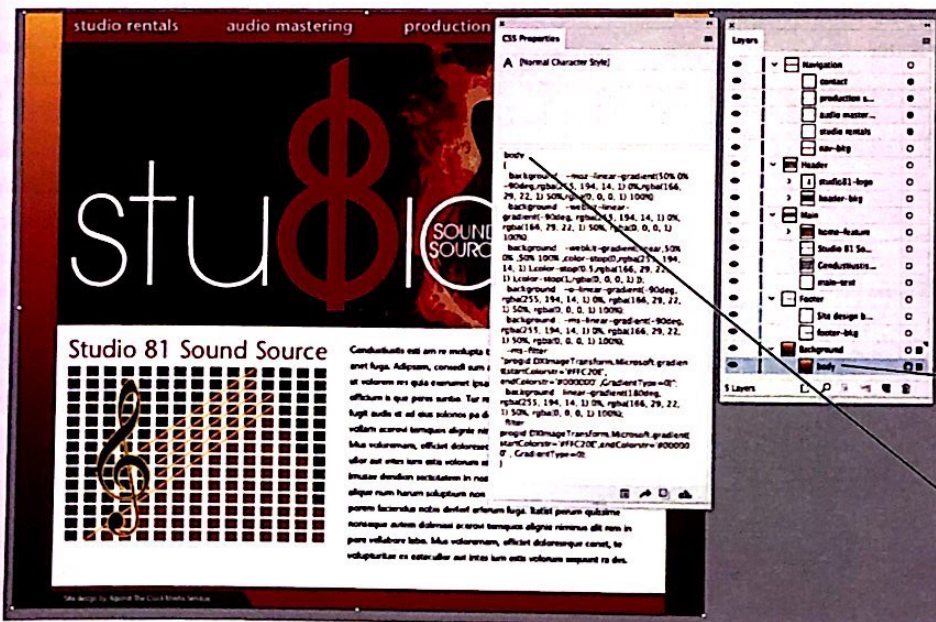
Drag the red swatch from the Site Colors group to the 50% location on the gradient ramp.

5. In the Layers panel, rename the selected object as body.
6. Review the CSS Properties panel.

If you define an object name using the name of a known HTML element, Illustrator creates a CSS tag selector instead of a class. The selector's name exactly matches the element name without a preceding period.

This selector will define the appearance of the body element in the HTML page. The gradient will appear behind all other elements; in other words, it will be the page background.

As you can see, the CSS code for a gradient is fairly complex. It defines the color (including transparency) and position of each stop in the gradient.



Change the object's name to body.

The resulting tag selector will apply to the HTML body element.

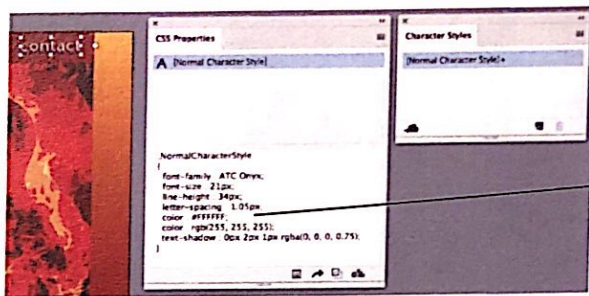
7. Save the file and continue to the next exercise.

CREATE CHARACTER STYLES

The final required piece for this project is to control the appearance of text in various elements of the site design. This is accomplished by creating character styles that define the tag or class name to which each set of formatting options should apply.

1. With **site-design.ai** open, open the **Character Styles** panel (**Window>Type>Character Styles**).
2. Using the **Selection tool**, select the type object with the word **“contact”** in the **Navigation area** at the top of the artboard.

The **CSS Properties** panel shows a class selector that will define the formatting in this object. Because no specific character style is defined, the application generates a class based on the **Normal Character Style** that is applied by default. (Class names cannot include space characters, so the default class name is `.NormalCharacterStyle`.)

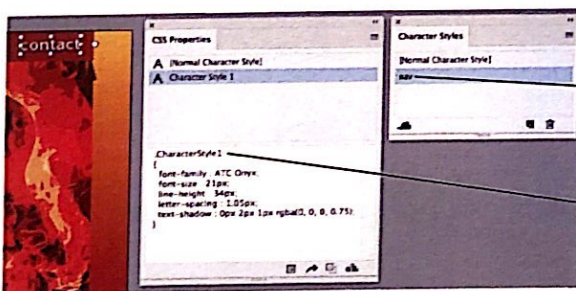


These properties maintain the applied formatting in language that can be understood in CSS.

3. With the type object selected, click the **Create New Style** button at the bottom of the **Character Styles** panel.
4. Double-click the resulting style and change its name to **nav**.

The first click of the double-click applies the new style to all text in the selected type object. The second click highlights the style name so that you can type to rename it.

When you rename the style, the selector name in the **CSS Properties** panel should automatically change to reflect the new name. Unfortunately, it does not change until you click away from the selected object. This is a minor bug in the application, but you should be aware of the issue.



The nav character style is now applied to all type in the selected object.

The selector name does not yet reflect the new name.

Note:

Character styles only store character formatting options; they do not store paragraph formatting options such as space before/after. Character leading, which controls the space from one baseline to the next and is a character formatting option, is mapped to the line-height property of CSS.

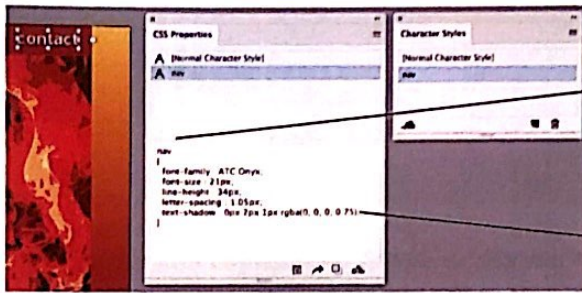
Paragraph spacing must be defined using the margin and padding CSS properties; this cannot be accomplished in Illustrator at the time of this writing.

Note:

If you use individual type objects for each paragraph with the same character style applied, the resulting CSS would create separate classes for each item, such as `.nav1`, `.nav2`, and so on. To avoid these unwanted classes, you should create each item as a paragraph in the same Illustrator type object.

5. Click away from the selected object, then click to select it again.

After reselecting the type object, the CSS property accurately reflects the new name. If you look at the property values in the lower half of the panel, however, you might notice that the CSS does not include character color values. This is a bug in the software that requires a minor workaround to solve.



Deselect and then reselect the object to show the revised selector name in the CSS Properties panel.

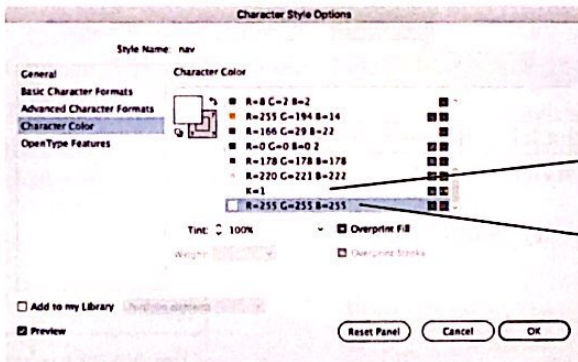
The CSS does not include character color values.

Note:

On Windows, the type object's drop shadow property is not reflected in the CSS. There is currently no workaround for this problem.

6. In the Character Styles panel, double-click the nav style away from the style name to open the Character Style Options dialog box.

7. Display the Character Color options in the dialog box and make sure the Fill Color swatch is active. Click to select any existing swatch other than the white one, then click to reselect the white color swatch.



Click to select any other fill color...

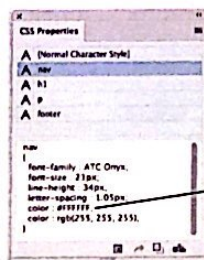
...then click to reselect the white fill color.

Note:

If a type object includes paragraphs with different formatting, you have to select specific paragraphs before creating new character styles.

8. Click OK to apply the change, then click the nav item in the CSS Properties panel.

After changing and then reapplying the correct color to the character style, the color properties are added to the related CSS selector.



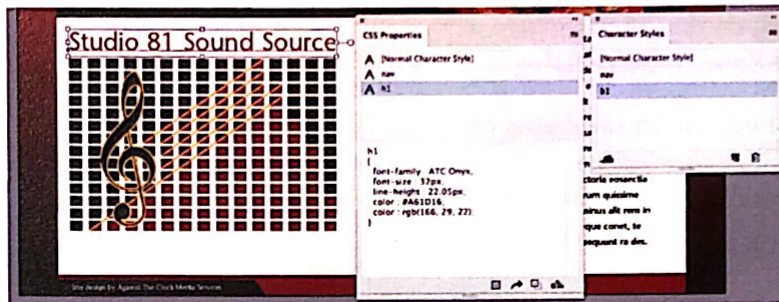
Two color properties are added to the nav selector.

- Click to select the “studio rentals” type object, then shift click to select the “audio mastering” and “production services” type objects. With all three type objects selected, click the nav style in the Character Styles panel.

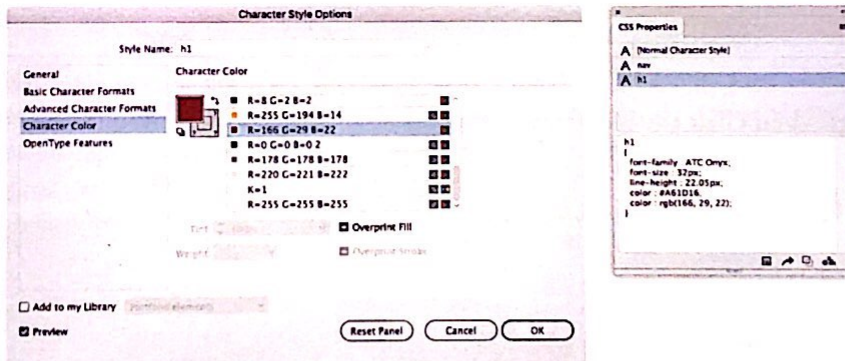
If you don't apply the character style, additional CSS would be generated for each of the type objects.



- Repeat this process to create a new character styles named **h1**, based on formatting applied to the type object above the artwork in the main-text area.



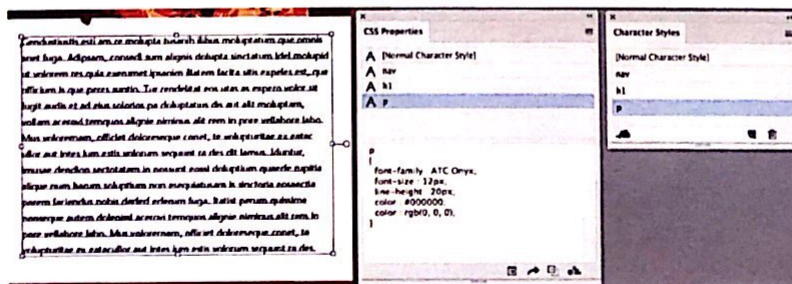
- Open the Character Style Options dialog box for the h1 style, and reapply the R=166 G=29 B=22 swatch to the h1 character style.
- Click OK to finalize the style change, then click the h1 item in the CSS Properties panel to see the new color values.



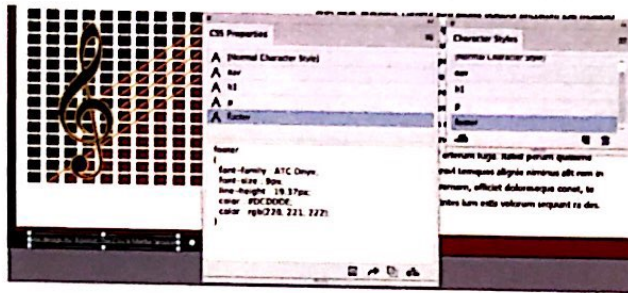
Note:

You can copy selector text in the CSS Properties panel and then paste it into an HTML or CSS file in an HTML editor application such as Adobe Dreamweaver.

- Repeat this process to create a new character style named **p**, based on formatting applied to the multi-line type object to the right of the feature art. Reapply black as the character color.



- Repeat this process to create a new character style named **footer**, based on formatting applied to the type object in the footer area. Reapply R=220 G=221 B=122 as the character color.



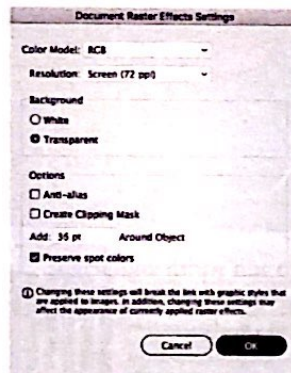
- Save the file and continue to the next exercise.

EXPORT CSS AND IMAGE FILES

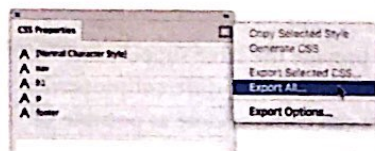
Now that you have defined the object names and created the necessary character styles, the final step is to create the CSS file and export the necessary images for the HTML page to display properly in a browser window.

- With **site-design.ai** open, deselect everything in the file.
- Choose **Effect > Document Raster Effects Settings**.

The document color mode and resolution are established in the Advanced section of the New Document dialog box. You can use this dialog box to review and, if necessary, change those settings.



- Click **OK** to close the dialog box.
- Open the **CSS Properties** panel **Options** menu and choose **Export All**.



Note:

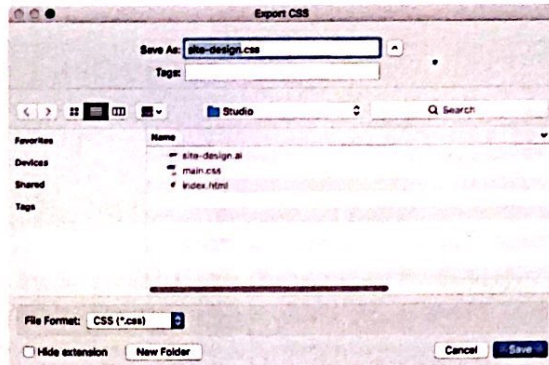
Some devices (specifically, tablets and some laptops) can display higher than 72 ppi images. We are using 72 ppi in this project for simplicity, but you might want to include higher-resolution images depending on your content.

Note:

You can select specific styles in the panel and choose **Export Selected CSS** to create a file with only certain selectors.

5. In the resulting Export CSS dialog box, make sure your WIP>Studio folder is selected as the target, then click Save.

When you export a CSS file, the file name defaults to be the same as the active Illustrator file. The HTML file in this project uses that name, so do not change it.



6. Review the options in the resulting dialog box.

The CSS Export Options dialog box determines exactly what is included in the export process.

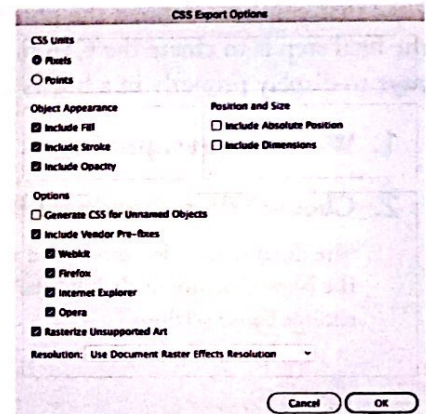
- **CSS Units.** This defines the units of measurement that will be used for CSS properties. Because websties are viewed on monitors, which display pages using pixels, Pixels is the default selection.
- **Object Appearance.** These options determine whether fill, stroke, and opacity values are included in the CSS selectors. All three options are selected by default.
- **Include Absolute Position.** By default, HTML element positioning is relative to the container; for the overall page, that means relative to the browser window. This option can be used to add position properties based on the top-left corner of the artboard, which means elements will not move when the browser window gets larger or smaller. For example:

```
position : absolute;  
left : 50px;  
top : 400px;
```

- **Include Dimensions.** This option can be used to add width and height properties to a selector so that the related element in the HTML page has the same size as the object in the Illustrator file. For example:

```
width : 780px;  
height : 50px;
```

- **Generate CSS for Unnamed Objects.** When checked, Illustrator creates class selectors for all objects in the file, including those you did not specifically name in the Layers panel.
- **Include Vendor Pre-fixes.** Not all browsers provide the same support for some CSS properties. CSS includes a method for defining different properties for different browsers so that the all browsers can come as close as possible to rendering a page as close as possible to what you intend. When this option is checked, Illustrator includes all the necessary variations in the exported CSS file.
- **Rasterize Unsupported Art.** When this is checked, Illustrator automatically generates raster images for vector artwork that can't be properly linked in an HTML file. Exported files automatically use the PNG file format and extension.
- **Resolution.** This menu defines the resolution that will be used for exported images. By default, Illustrator uses the resolution setting that is defined in the Document Raster Effects Settings dialog box.



Note:

You can click the Export Options button at the bottom of the CSS Properties panel to open this dialog box at any time.

7. Click OK to generate the CSS for the site-design file.

8. On your desktop, examine the contents of the WIP>Studio folder.

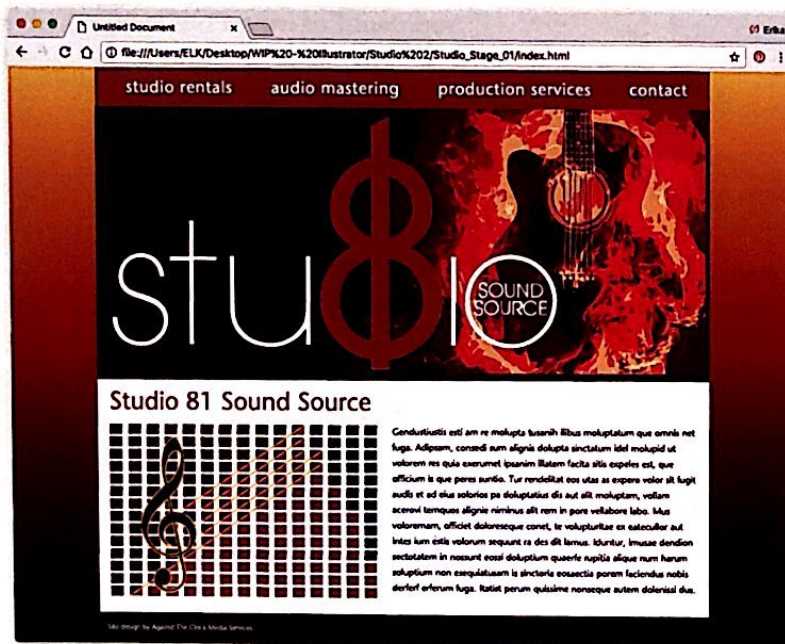
As you can see, the folder now includes a second CSS file (site-design.css) which contains the selectors based on content in the Illustrator file. Four PNG image files have also been generated.



9. Using any browser, open index.html from your WIP>Studio folder.

The image files generated by the Illustrator Export process should appear properly in place of the broken-link icons that you saw when you first viewed this file. The classes in the new CSS file correctly define the background images, colors, and most type formatting options that are defined in the Illustrator layout.

However, you might notice several problems; specifically, the footer background image is missing.



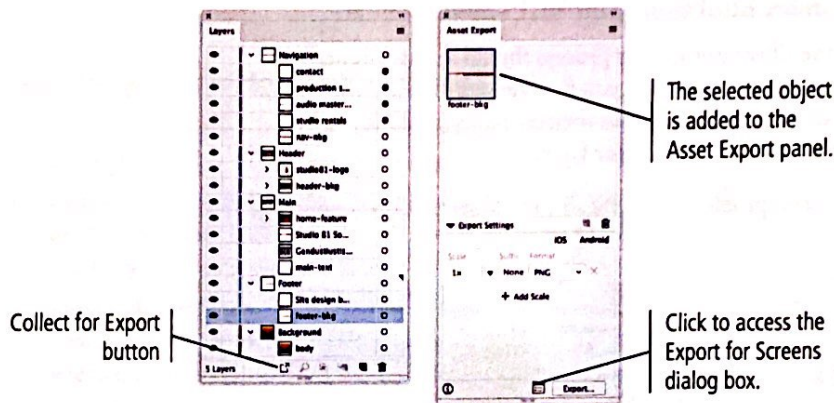
10. Continue to the next exercise.

MANUALLY EXPORT SITE ASSETS

Several manual steps are required to correct the problem you saw when you opened the HTML file. To complete this project, you need manually export the image for the footer background area.

1. With **site-design.ai** open in **Illustrator**, make sure nothing is selected in the file.
2. Using the **Layers** panel, click to select the **footer-bkg** image object, then click the **Collect for Export** button at the bottom of the panel.

Using the **Collect for Export** button in the **Layers** panel automatically adds the selected object(s) to the **Asset Export** panel, which provides an easy interface to create the files you need for specific **Illustrator** graphics.

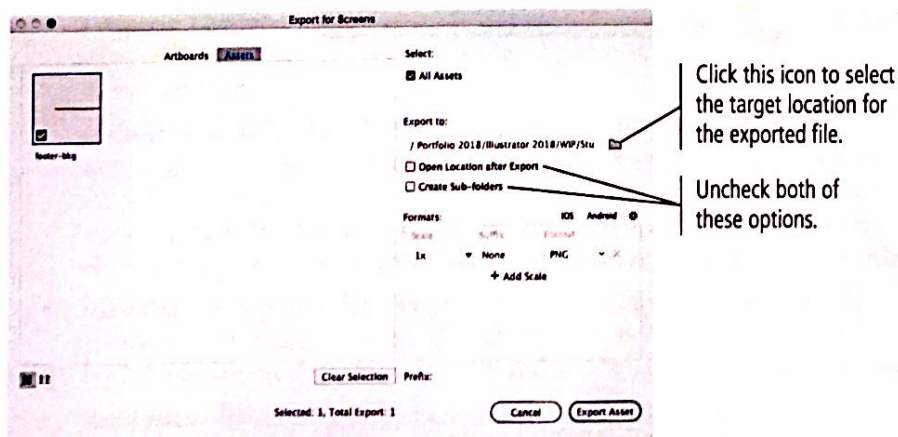


3. Click the button at the bottom of the **Asset Export** panel to open the **Export for Screens** dialog box.

If you simply click the **Export** button in the **Asset Export** panel, these defined files are exported using the default location settings. It is a good idea to be sure of where you are exporting files, however; you can verify those settings in the **Export for Screens** dialog box.

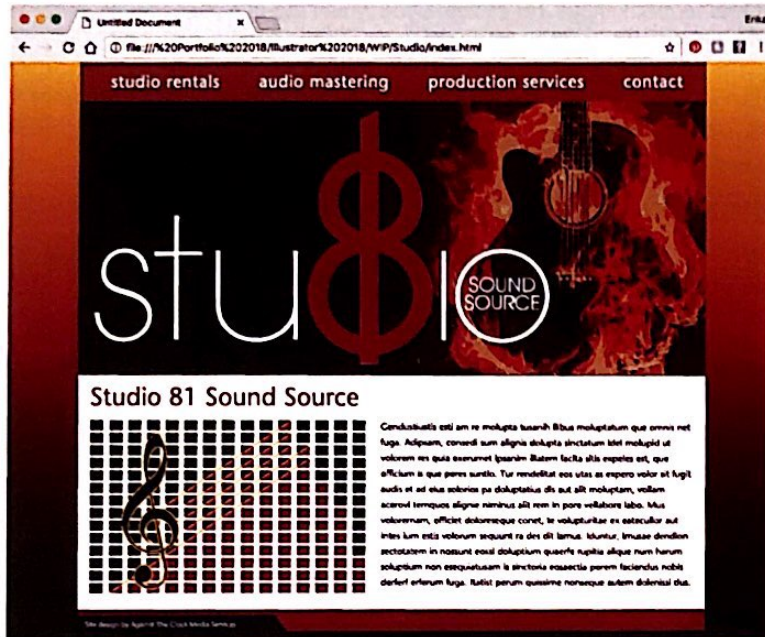
4. On the right side of the dialog box, click the **Folder** icon. Navigate to your **WIP>Studio** folder as the target location, then click **Choose**.
5. Uncheck the **Open Location after Export** and **Create Sub-Folders** options.

The **HTML** and **CSS** for this project call for images to be placed in the same location as the **index.html** file; you do not want the exported images to be placed into subfolders.



6. Click Export Asset.

7. In a browser, open or refresh the index.html file.



8. Close the browser and return to Illustrator.

9. Save the Illustrator file and close it.

Exporting Assets for Web Design

Responsive web design, or creating pages that are optimized for the actual size of device being used to display those pages, often calls for a number of different files for each image. For example, you would use one image for an extra-small device (a smartphone) and another image for a large display (a desktop monitor).

In addition to using the Collect for Export button in the Layers panel, you can drag an object into the Asset Export panel, determine what settings you want to use for the resulting files, and export all the defined assets in a single process.

Use the Selection tool to drag any object into the panel.



Double-click the asset name to define the resulting file name.

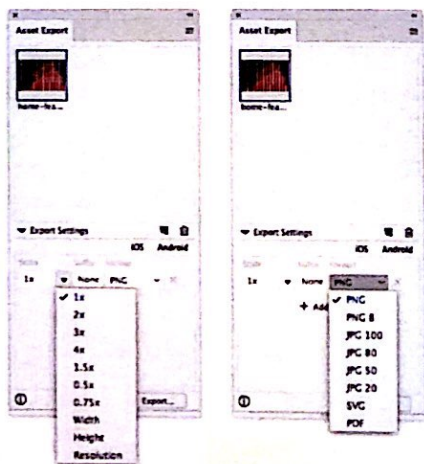


The lower half of the panel defines the settings that will be used for the exported files. The Scale menu includes most of the common sizes that are used. If you choose the Width or Height options, you can define the specific size of the exported file. If you choose the Resolution option, you define the resulting file's resolution (ppi) at 100% of the asset's original size.

When you choose one of the scaling options (2x, 3x, etc.) in the Scale menu, the Suffix field defaults to industry-standard suffixes that are added to the file name you define for each asset. You can also use the field to define custom suffixes, such as "-small" or "-large".

The format menu lists the common formats that are used in web design. The default PNG option supports continuous color and alpha transparency, which means it is suitable for most images; PNG 8 limits the resulting file to a gamut of 256 colors, so it is best suited to logos or other images that do not have a wide range of color variation.

The various JPEG options determine the level of quality in the resulting file; for example, JPG 100 is maximum quality and lowest compression while JPG 20 is minimum quality and highest compression.



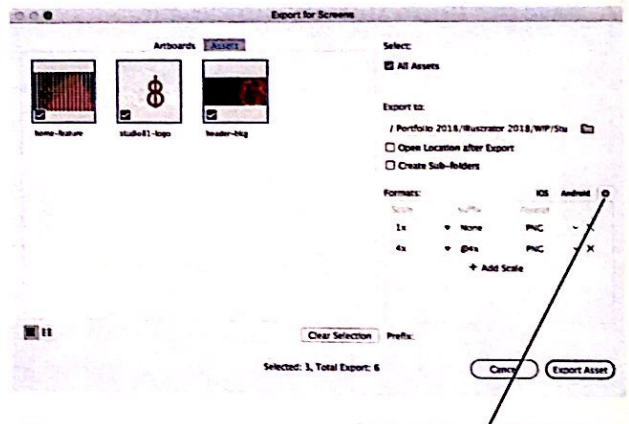
Once you have defined the settings you want to use, you can click the Export button to export files for assets selected in the top half of the panel.



Click here to open the Export Assets dialog box.

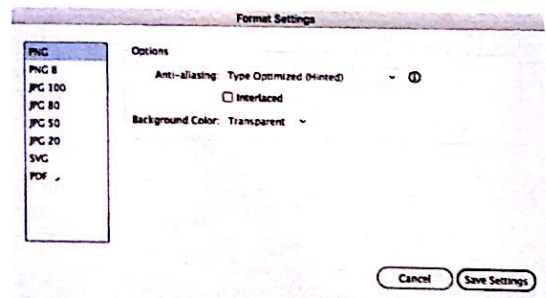
Click here to open the export images selected in the top half of the panel.

You can also click the Launch... button to open the Export for Screens dialog box, where you can accomplish the same export tasks for defined assets or artboards.



Click here to open the Format Settings dialog box.

To change the options related to individual file formats, you can choose Format Settings in the Asset Export panel Options menu, or click the Advanced Settings button in the Export for Screens dialog box.



Project Review

fill in the blank

1. You can check the _____ option in the Recolor Artwork dialog box to reflect color changes in selected objects.
2. If the _____ option in the Recolor Artwork dialog box is active, you can make universal changes (such as brightness) to all colors in a group.
3. The _____ tool can be used to apply color swatches from selected groups based on overlap areas rather than entire vector objects.
4. When the _____ option is active, straight lines reproduce more sharply because they no longer require anti-aliasing in the resulting raster image.
5. In CSS, a(n) _____ selector defines properties for a specific HTML element. This type of selector name is exactly the same as the element name.
6. In CSS, a(n) _____ selector defines properties for any element identified with that attribute. This type of selector name always begins with a period.
7. In HTML, the _____ element contains all elements that will be visible in the browser window.
8. Choose _____ to convert a vector object to a raster image on the artboard.
9. True or false: The document color mode and resolution are fixed in the Advanced section of the New Document dialog box; you cannot change them once you create the file.

10. You can check the _____ option to override the default relative positioning of HTML elements. If this option is checked, elements will not move if a user makes the browser window larger or smaller.

short answer

1. Briefly define an HTML element, and provide at least two examples.
2. Briefly explain the concept of a CSS class.
3. Briefly explain two advantages of designing a website interface in Illustrator.

Portfolio Builder Project

Use what you learned in this project to complete the following freeform exercise.

Carefully read the art director and client comments, then create your own design to meet the needs of the project.

Use the space below to sketch ideas; when finished, write a brief explanation of your reasoning behind your final design.

art director comments

All professional designers need a portfolio of their work. If you have completed the projects in this book, you should now have a number of different examples to show off your skills using Illustrator.

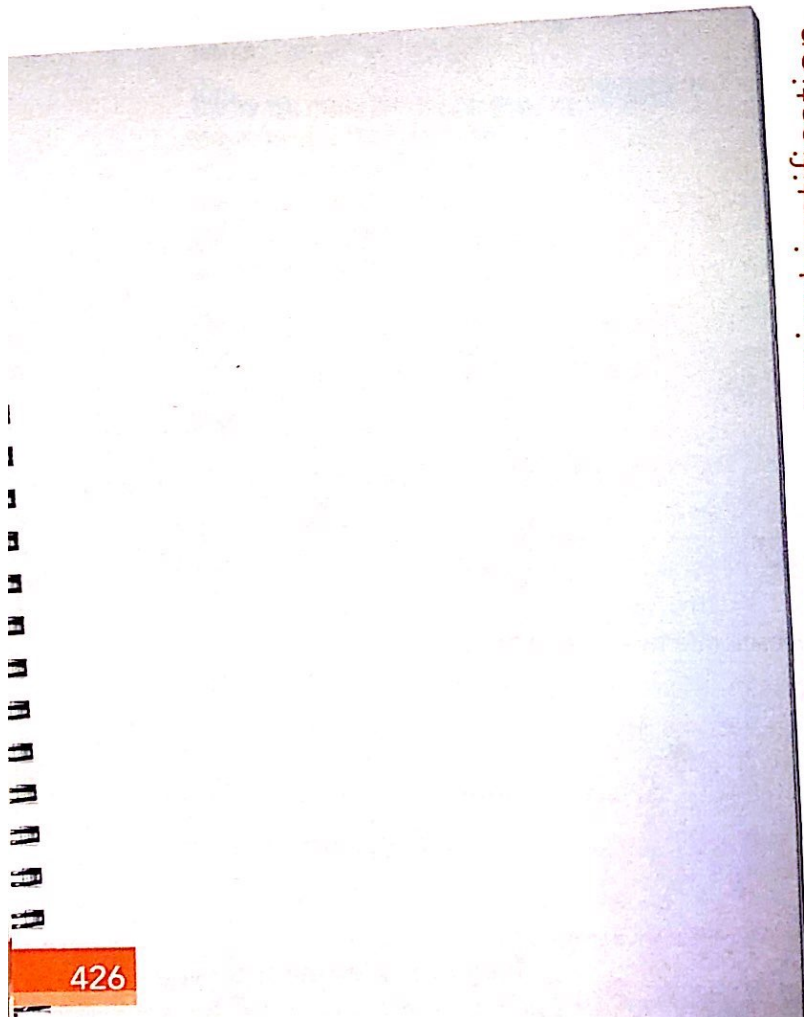
The eight projects in this book were specifically designed to include a broad range of *types* of projects; your portfolio should use the same principle.

client comments

For this project, you are your own client. Using the following suggestions, gather your best work and create printed and digital versions of your portfolio:

- Include as many different types of work as possible.
- Print clean copies of each finished piece that you want to include.
- For each example in your portfolio, write a brief (one- or two-paragraph) synopsis of the project. Explain the purpose of the piece, as well as your role in the creative and production process.
- Design a personal promotion brochure — create a layout that highlights your technical skills and reflects your personal style.
- Create a PDF version of your portfolio so you can send your portfolio via email, post it on job sites, and keep it with you on a flash drive at all times — you never know when you might meet a potential employer.

project justification



Project Summary

Web design typically involves a partnership between the site designer and a web developer. The designer creates the look and feel of the site, and the developer creates the code that makes the page function properly. The new options in Illustrator CC make it much easier to translate an Illustrator file into the necessary pieces that are required by the developer, including the cascading style sheets (CSS) that translate Illustrator objects into code that a browser can read to render the HTML elements as closely as possible to what you intend.

As we mentioned previously, the site design you used in this project is a very simple example, using only a few page elements to illustrate how Illustrator translates artboard elements to HTML and CSS elements. The skills you learned in this project would apply equally to more complex sites.

We also explained a number of concepts related to HTML and CSS in general. To improve your marketability and skills beyond using Illustrator for website design, we highly encourage you to pursue a more thorough and detailed knowledge of these topics.

