Short exercises for Murach's HTML and CSS (5th edition)

Each of these short exercises requires you to use just one or two web development skills, and each is designed so it can be done in from 5 to 45 minutes.

Guidelines for doing the short exercises

- Do the exercise steps in sequence. That way, you will work from the most important tasks to the least important.
- Feel free to copy and paste code from the book applications, book examples, or exercises that you've already done.
- Use your book as a guide to coding.
- If you are doing an exercise in class with a time limit set by your instructor, do as much as you can in the time limit.
- Because each short exercise is independent of the others, many of the links in the pages that you will be given to start the exercises won't work. To provide for that, the href attribute for each of those links is coded as a hash character (#). That way, you won't get a "file not found" error if you click the link. Instead, you'll just stay on the same page.

Short 3-1 Create an HTML page for a speaker

In this exercise, you'll create a semantically correct, HTML page that looks like the one below. Estimated time: 20-30 minutes.

Andrew Ross Sorkin, author of Too Big to Fail

November



New York Times columnist and author, Andrew Ross Sorkin, has been described as "the most famous financial journalist of his generation." His book, Too Big to Fail, was the first behind-the-scenes account of the financial crisis that led to our current recession.

The Economist, The Financial Times, and Business Week all named *Too Big To Fail* one of the best books of the year. The book was published by Viking October 20, 2009. The book was adapted as a movie by HBO Films and premiered on HBO on May 23, 2011.

The cast of the movie: Too Big to Fail

- William Hurt as Hank Paulson
- 2. Paul Giamatti as Ben Bernanke
- 3. Billy Crudup as Timothy Geithner

Movie reviews

"Lots of heat but not very much light. It came across as a kind of daytime soap opera version showing the personalities of the players rather than dealing with the nuts and bolts of what really happened. Even that would not have been so bad but the movie tries to portray lots of these folks as sympathetic figures just trying to do the right thing."

"I am watching this for the 3rd time, trying to understand how this large group of capitalist pigs could royally screw their families, descendants, neighbors, countrymen and the rest of the whole world with absolutely no compassion."

Prepared by: Your Name

Date: Today's Date

1. Open this HTML file:

short_exercises\town_hall\speakers\c03x_sorkin.html

Note that it contains a head section and all the copy for the text in the body of the page, but the HTML tags haven't been applied to that text.

- 2. Apply the HTML tags to the text so the text will look like it does in the page above. Remember too that these tags should be semantically correct. The last two lines should be coded within a footer element, and everything else should be within a main element.
- 3. Add the image for the speaker: sorkin desk260.jpg, which is 260 pixels wide.
- 4. Use character entities or inline formatting tags to add the quotation marks and italics that this page requires.

Short 5-1 Apply CSS to an HTML page

In this exercise, you'll apply the CSS skills that you learned in chapters 4 and 5 to an existing HTML document. The resulting page should look something like the screen shot that follows. Estimated time: 30 to 45 minutes.

Andrew Ross Sorkin, author of Too Big to Fail

November



New York Times columnist and author, Andrew Ross Sorkin, has been described as "the most famous financial journalist of his generation." A leading voice on Wall Street and corporate America, his New York Times bestseller, *Too Big to Fail*, was the first true, behind-the-scenes, moment-by-moment account of how that financial crisis developed into a global tsunami.

The Economist, The Financial Times, and Business Week all named *Too Big To Fail* one

of the best books of the year. The book was published by Viking October 20, 2009. The book was adapted as a movie by HBO Films and premiered on HBO on May 23, 2011. The film was directed by Curtis Hanson, and the screenplay was written by Peter Gould.

Praise for Too Big to Fail

"Vigorously reported, superbly organized...for those of us who didn't pursue MBAs and have the penny-ante salaries to prove it."

Julia Keller, Chicago Tribune

"Sorkin's prodigious reporting and lively writing put the reader in the room for some of the biggest-dollar conference calls in history. It's an entertaining, brisk book."

Paul M. Barrett, The New York Times Book Review

The cast of the movie: Too Big to Fail

- · William Hurt as Hank Paulson
- · Paul Giamatti as Ben Bernanke
- · Billy Crudup as Timothy Geithner
- · Edward Asner as Warren Buffet

Prepared by: Your Name Date: Today's Date

1. Open the HTML and CSS files that follow, and note that the CSS file includes one style rule:

short_exercises\town_hall\speakers\c05x_sorkin.html
short exercises\town_hall\styles\c05x_sorkin.css

- 2. Code a style rule for the html element that sets the background color to yellow.
- 3. Enhance the style rule for the body so the width is 650 pixels, the body is centered in the browser window, and the body has a double blue border around it like the one above. If you need to make any other changes to the body, do that too.

- 4. Code a style rule for the main element that puts padding around its contents. Then, code a style rule for the footer that puts a blue border above it. Note that this border doesn't touch the border for the body.
- 5. Code style rules for the h1, h2, and h3 elements. The h1 font should be 150% of the default specified in the body, the h2 font should be 125% of the default font, and the h3 font should be 115% of the default font. The h1 font should also be blue. Then, apply appropriate margins or padding to the h1, h2, and h3 elements so the spacing before and after the headings is similar to what's shown above.
- 6. Code the style rules for the , blockquote, ul, and li elements so the spacing before and after the elements is similar to what's shown above.
- 7. Code a style rule for the cite element that changes its color to blue and removes the italics from the text.
- 8. Code a style rule for the paragraphs that contain cite elements. This style rule should right align the paragraphs and increase the spacing below to .75em. One way to do this is to add a class attribute to these paragraphs and use that class as the selector for the style rule.
- 9. Float the image to the left and apply appropriate margins or padding so the text flows to its right as shown above.
- 10. Apply rules to the footer or the paragraphs within the footer so the font size is 90% of the default, the font weight is bold, the paragraphs are centered, and the spacing above and below is similar to what's shown above.

Short 6-1 Use the CSS columns feature

In this exercise, you'll float the speaker image to the left, adjust the formatting as needed, and apply two-column formatting to the article. Estimated time: 5-10 minutes.



San Joaquin Valley Town Hall Celebrating our 75th Year

Guest Speakers

October David Brancaccio



November Andrew Ross Sorkin



January Amy Chua



February Scott Sampson

David Brancaccio: October

Dissecting Economic Disaster



David A. Brancaccio is an American radio and television journalist. He is the host of the public radio business program Marketplace Morning Report and the PBS newsmagazine Now.

He began his career in broadcasting on WTVL radio in 1976 at the age of fifteen. He received a Bachelor of Arts in African Studies and History from Wesleyan University in 1982 and a master's in journalism from Stanford

Columbia Award (1998) and the George Foster Peabody Award (2001). He anchored the television newsmagazine, California Connected, that aired on many Californian PBS stations, from 2002 to 2003.

In 2003, Brancaccio left Marketplace to join Bill Moyers on Now. Brancaccio was co-host for over a year prior to Moyers' retirement at the end of 2004. Among his beats: business innovation and the economy, politics, human rights, national security, the environment, health care, and science policy.

In 2011, Brancaccio returned to American Public Media's Marketplace as a correspondent covering new economy issues and tech/innovation. He is now host and senior editor of the popular business program The Marketplace Marrian Papert from 6:51

1. Open these HTML and CSS files, and run the HTML file:

short_exercises\town_hall\speakers\c06x_brancaccio.html
short_exercises\town_hall\styles\c06x_speaker.css

- 2. Float the image to the left instead of the right and adjust the space around the image.
- 3. Apply two-column formatting to the article using the column-count property as in figure 6-10. If this creates any formatting problems, adjust the HTML or the CSS so the page looks like the one above. One hint: Use CSS to set the width of the image to 275 pixels so it fits in one column.

Short 6-2 Switch the columns of a page

In this exercise, you'll switch the section and aside of a speaker page so it looks like the one below. That will demonstrate your understanding of floating, margins, and padding. Estimated time: 5-10 minutes.



economy issues and tech/innovation.

1. Open the HTML and CSS files for the page:

in African Studies and History from

- short_exercises\town_hall\speakers\c06x_brancaccio.html
 short exercises\town_hall\styles\c06x_speaker.css
- 2. Change the style rules for the section and aside so the columns are switched.
- 3. Adjust the margins and padding for the section and aside so the formatting is similar to the formatting shown above.

Short 6-3 Add a third column to a page

In this exercise, you'll add a third column to an index page. That will demonstrate your understanding of floating, margins, and padding. Estimated time: 10-15 minutes.



1. Open the HTML and CSS files for the page:

short_exercises\town_hall\c06x_index.html
short exercises\town hall\styles\c06x main.css

- 2. Note that another aside has been added to the HTML page. That aside contains the heading and text shown in the third column above.
- 3. If necessary, rearrange the code in the HTML file so the page can be presented in three columns as shown above.
- 4. Modify the code in the CSS file so it provides for the three columns with the approximate spacing shown above.

Short 7-1 Start an email

In this exercise, you'll add a paragraph at the bottom of the speaker's page that will start an email. Estimated time: 5-10 minutes.



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January Amy Chua



February Scott Sampson



Return to Home page

Fossil Threads in the Web of Life

February Scott Sampson

What's 75 million years old and brand spanking new? A teenage Utahceratops! Come to the Saroyan, armed with your best dinosaur roar, when Scott Sampson, Research Curator at the Utah Museum of Natural History, steps to the podium. Sampson's research has focused on the ecology and evolution of late Cretaceous dinosaurs and he has conducted fieldwork in a number of countries in Africa.



Scott Sampson is a Canadian-born paleontologist who received his Ph.D. in zoology from the University of Toronto. His doctoral work focused on two new species of ceratopsids (horned dinosaurs) from the Late Cretaceous of Montana, as well as the growth and function of certopsid horns and frills.

Following graduation in 1993, Sampson spent a year working at the American Museum of Natural History in New York City, followed by five years as assistant professor of anatomy at the New York College of Osteopathic Medicine on Long Island. He arrived at the University of Utah accepting a dual position as assistant professor in the Department of Geology and Geophysics and curator of vertebrate paleontology at the Utah Museum of Natural History. His research interests largely revolve around the phylogenetics, functional morphology, and evolution of Late Cretaceous dinosaurs.

In addition to his museum and laboratory-based studies, Sampson has conducted paleontological work in Zimbabwe, South Africa, and Madagascar, as well as the United States and Canada. He was also the on-air host for the Discovery Channel's Dinosaur Planet and recently completed a book, Dinosaur Odyssey: Fossil Threads in the Web of Life, which is one of the most comprehensive surveys of dinosaurs and their worlds to date.

For up-to-date information on the luncheon, please email us.

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1. Open this HTML file and run it:

short exercises\town hall\speakers\c07x sampson.html

2. In the HTML file, add the boldfaced paragraph at the bottom of the article (use a element to apply the boldfacing). When the user clicks on "email us", an email should be started that is populated with this data:

To: eleanor@townhall.com

CC: georgia@townhall.com

Subject: Scott Sampson luncheon

Reminder: When you populate two or more fields, you separate them with ampersands (&).

Short 7-2 Create a vertical navigation menu

In this exercise, you'll create a vertical navigation menu in the sidebar as shown below. Note that each item in the menu includes a right-arrow symbol, which is actually a background image. Estimated time: 20-30 minutes.



1. Open the HTML and CSS files that follow and display the page in a browser:

short_exercises\town_hall\speakers\c07x_sampson.html
short exercises\town hall\styles\c07x speaker.css

- 2. Modify the HTML so the sidebar doesn't include the speaker images and so both the month and name for each speaker are in an <a> element. Then, enclose the <a> elements within the li elements of an unordered list as shown in figure 7-14, and enclose the ul element in a nav element that has "nav list" as its id.
- 3. Add the CSS for formatting the navigation menu. To speed that up, you may want to copy the code from the example for figure 7-14 and then make the appropriate adjustments so the links are rectangular with a black border.
- 4. Add rounded corners to the links as well as box shadows with #800000 as the color. The current link should also have #800000 as its color. As you do this, you may want to refer to figure 5-9.
- 5. Add the symbols to the links. To do that, use the background-image, background-repeat, and background-position properties as shown in figure 5-10. The symbol is in the images file, and it is named right.jpg. In this case, you don't want to repeat the image, and you want to position it in the middle vertically and about 95% from the left
- 6. If necessary, adjust the margins, spacing, and font sizes for any of the elements.

Short 8-1 Create a fluid design

In this exercise, you'll convert a page so it uses a fluid layout and scalable images. When you're done, the page will look as shown below when the width of the browser window is reduced. Estimated time: 20 to 30 minutes.



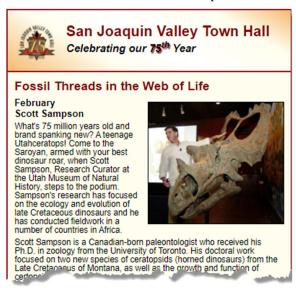
1. Open the HTML and CSS files that follow and display the page in a browser:

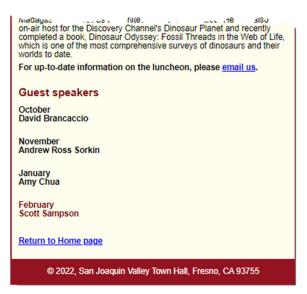
short_exercises\town_hall\speakers\c08x_sampson.html
short_exercises\town_hall\styles\c08x_speaker.css

- 2. Reduce the width of the browser window so it's less than the width of the page. That way, you'll be able to see how the page changes as you convert it to a fluid design.
- 3. Modify the CSS for the body so it takes up 98% of the browser window and so its maximum width is the current width.
- 4. Convert the widths of the section, the aside, and the li elements within the navigation menu to percentages.
- 5. Convert any left or right margins or padding to percentages. (Hint: If any measurements are specified in ems, you can convert them to pixels by multiplying by 16 since that's the base font size.)
- 6. Make the image in the article scalable so it's always 50 percent of the width of the article.

Short 8-2 Add two media queries

In this exercise, you'll add two media queries to a page so it works in both desktop and mobile layouts. When you're done, the page will look as shown below when the width of the browser window is reduced to 650 pixels or less. Estimated time: 15 to 20 minutes.





1. Open the HTML and CSS files that follow and display the page in a browser:

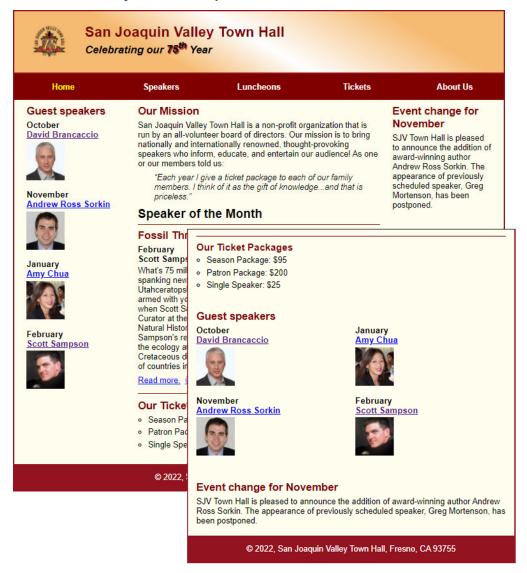
```
short_exercises\town_hall\speakers\c08x_sampson.html
short_exercises\town_hall\styles\c08x_speaker.css
```

- 2. Add a meta element to the HTML that sets the width property for the viewport to the device width and the initial zoom factor to 1.
- 3. Code a media query for the screen media type that has a maximum width of 850 pixels.

- 4. Within the media query, change the base font size for the page so it's 90% of the default font size. In addition, remove the border, box shadow, and background image from the list items in the sidebar, and remove the left padding from the links in the sidebar.
- 5. Code another media query for the screen media type that has a maximum width of 650 pixels.
- 6. Within the media query, remove the floating from the section and aside, and change the width of those elements so they fill the page. Then, adjust the padding as necessary so the page looks as shown above.

Short 9-1 Use Flexible Box Layout to add a third column to the Town Hall home page

In this exercise, you'll add a third column to a Town Hall home page that uses flexbox so it works in both desktop and mobile layouts. Estimated time: 20 to 30 minutes.



1. Open the HTML and CSS files that follow:

short_exercises\town_hall\c09x_index.html
short exercises\town hall\styles\c09x main.css

2. Note that a second aside has been added to the HTML after the first aside and that both asides have been give an id. The new aside contains the heading and text shown in the third column above.

- 3. Test the index page to see that the second aside is displayed between the first aside and the section.
- 4. In the CSS file, note that the main element is implemented as a flexbox and that the left aside and the section elements contain flex properties that specify their initial width and order.
- 5. Modify the CSS so the flex items in the flexbox for the main element are laid out as shown above in desktop layout.
- 6. Modify the CSS for the media query for screens with widths of 767 pixels or less so the flex items for the main element are laid out in a single column as shown above. In addition, display the speakers in the first aside in two columns.

Short 10-1 Use a 12-column grid for the Town Hall home page

In this exercise, you'll modify the Town Hall home page so it uses a 12-column grid instead of template areas for the body of the page in desktop layout. However, the elements within the body like the navigation menu and the main element will continue to use template areas for their components, both in desktop and mobile layout. Estimated time: 20 to 30 minutes.



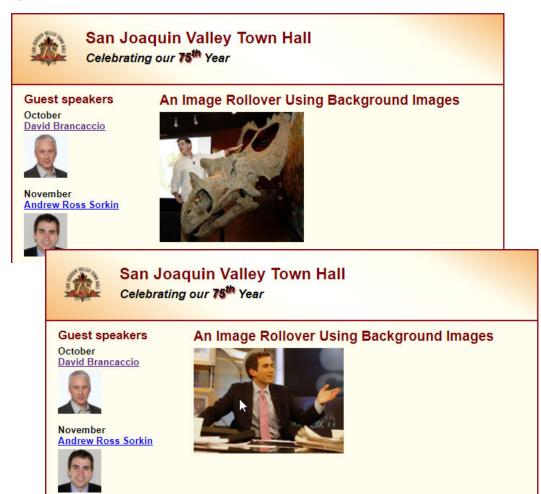
1. Open the HTML and CSS files that follow:

short_exercises\town_hall\c10x_index.html
short exercises\town hall\styles\c10x main.css

- 2. Test the index page to see that it works correctly.
- 3. In the CSS file, note that the code for the body area sets up a grid with template areas that are used for the header, navigation menu, main element, and footer. In addition, grids with template areas are used to lay out the navigation menu and main element in desktop layout and the header in mobile layout.
- 4. Modify the CSS so it uses the 12-column grid concept for the body element in desktop layout, but retains the grids that use template areas for the other elements.

Short 11-1 Do an image rollover with CSS

In this exercise, you'll do an image rollover by using background images. When you're done, the page will look as shown below before and after the rollover. Estimated time: 5-10 minutes.



1. Open these HTML and CSS files, and run the HTML file:

short_exercises\town_hall\speakers\c11x_sampson.html
short exercises\town hall\styles\c11x rollovers.css

Note that it displays the image for Scott Sampson (sampson_dinosaur.jpg), as shown above.

2. Modify the HTML and CSS as shown in figure 11-6 so the image changes to the image for Andrew Ross Sorkin (sorkin_desk260.jpg) when the user hovers the mouse over the original image. To make this work, set the height and width properties for the element to 260px. Because the images aren't quite that size, you'll also need to set the background-repeat property to no-repeat.

Short 12-1 Enhance a table

In this exercise, you'll start from a table that looks like this:

Name	E-mail	Years of Service	
Joel Murach	joelmurach@yahoo.com	22	
Anne Boehm	anne@murach.com	34	
Zak Ruvalcaba	zak@modulemedia.com	4	
Judy Taylor	judy@murach.com	39	
Bethany Lee	bethany@murach.com	10	
Kelly Slivkoff	kelly@murach.com	25	
Juliette Baylon	juliette@murach.com	1	

Then, you'll expand and format the table so it looks like the one that follows. Estimated time: 20-30 minutes.

Department	Name	F-mail	Years of Service
-		2	
Editorial	Joel Murach	joelmurach@yahoo.com	22
	Anne Boehm	anne@murach.com	34
	Zak Ruvalcaba	zak@modulemedia.com	4
Marketing	Judy Taylor	judy@murach.com	39
	Bethany Lee	bethany@murach.com	10
Customer Service	Kelly Slivkoff	kelly@murach.com	25
	Juliette Baylon	juliette@murach.com	1
	<u>'</u>	Total Years of Service	105

1. Open this HTML file and run it:

short_exercises\town_hall\c12x_employee_table.html

Note that this HTML file uses embedded CSS in the head section to do the formatting.

- 2. Expand the HTML so the table has the caption and data shown in the second table above.
- 3. Expand the CSS so it does the formatting shown in the second table above.
- 4. If you used classes to do the alignment and apply the colors to the cells of the table, try using pseudo-classes to get the same results.

Short 13-1 Create a form

In this exercise, you'll complete a form so it looks as shown below. Estimated time: 20-30 minutes.

Contact inform	plete our survey nation
Email address:	
First name:	
Last name:	
Geographic inf	formation
State:	Two characters
Zip code:	Five digits
How did you he	ear about us?
Web Search:	
Facebook:	
Twitter:	
Email message:	
Thank you for	taking our survey!
	Submit Reset

1. Open this HTML file and run it to see that it already provides the first two headings, the first three fields, the last heading, and the two buttons:

short_exercises\town_hall\c13x_forms.html

- 2. Modify the attributes for the form so it uses the "get" method and submits the form to the file named survey_data.html. Then, test the submission of the completed form. This should display a page that shows the submitted data.
- 3. Add the autofocus attribute to the first field and the required attribute to all three of the fields. Then, test to make sure the data validation works.
- 4. Add the "Geographic information" heading and fields. These fields should also be required and they should have the placeholders that are shown above. To validate the state and zip code fields with regular expressions, you can use these patterns:

 $[A-Za-Z]{2}$ and $d{5}$

- 5. Add the "How did you hear about us" heading and checkbox fields.
- 6. Enhance the CSS in the HTML file so the form looks like the one above. In particular, you will need to change the width of the checkboxes so they will align right.
- 7. Do a final test to make sure everything works as it should.

Short 14-1 Embed audio in a page

In this exercise, you'll add audio to the top of the section in a speaker's page, but the audio controls won't show so the page will look the same. However, the audio will play automatically after the page is loaded. Estimated time: 5-10 minutes.



1. Open this HTML file:

short_exercises\town_hall\speakers\c14x_sampson.html

2. Add an audio element to the section element after the end of the article that plays the welcome.mp3 file in the media folder. Be sure to display controls that let you play the file.

Short 15-1 Use a CSS transition and transform

In this exercise, you'll use a transition and a transform to rotate elements when the mouse hovers over them as shown below. Estimated time: 10 to 15 minutes.



- 1. Open these HTML and CSS files, and run the HTML file:
 - short_exercises\town_hall\speakers\c15x_sampson.html
 short_exercises\town_hall\styles\c15x_speaker.css
- 2. Add CSS for a transform that will rotate the list items in the sidebar horizontally 360 degrees when the mouse hovers over them.
- 3. Add CSS for a transition that will cause the transform to last for 3 seconds.

Short 15-2 Use a CSS animation

In this exercise, you'll animate the image in the page header so it appears to bounce from left to right. Estimated time: 10 to 15 minutes.



- 1. Open these HTML and CSS files, and run the HTML file:
 - short_exercises\town_hall\speakers\c15x_sampson.html
 short exercises\town hall\styles\c15x speaker.css
- 2. Add CSS to the image in the header that will use an animation named "bounce" with a duration of half a second that will repeat eight times, use the ease-in timing function, and alternate direction.
- 3. Add an @keyframes selector rule that defines the keyframes for the animation. In the from group, set the left and right padding so the animation starts at the image's current position on the page. In the to group, set the left and right padding so the image moves to the right 20 pixels.

Short 18-1 Do image rollovers using jQuery

In this exercise, you'll use jQuery to do image rollovers without knowing how the JavaScript and jQuery work. In the aside for the web page, each speaker image should roll over when the mouse pointer hovers over it. Estimated time: 15-20 minutes.



- 1. Open these HTML and CSS files, and run the HTML file:
 - short_exercises\town_hall\speakers\c18x_sampson.html
 short exercises\town hall\styles\c18x speaker.css
- 2. Add a script element like the one in figure 18-12 to the head section of the HTML document that loads the jQuery library from a Content Delivery Network.
- 3. Add another script element to the head section for the rollover.js file that's in the javascript folder.
- 4. To set up the HTML so the rollovers work, you first need to set the id attribute of the ul element in the side bar that contains the images to "image rollovers".
- 5. Then, you need set the id attribute of each image to the rollover image. The rollover images are named:

brancaccio_EEC.jpg sorkin_desk260.jpg chua_220.jpg sampson dinosaur.jpg