

Apply your knowledge of CSS to create an elastic layout along with a drop cap and an irregular line wrap.

APPLY

Case Problem 1

Data Files needed for this Case Problem: arlogo.png, historytxt.css, lincoln01.png-lincoln10.png, lincolntxt.htm, modernizr-1.5.js

American Rhetoric Professor Annie Chiu teaches rhetoric and history at White Sands College. She has asked for your help in designing a companion Web site for her course in American Rhetoric. She's given you the content and graphics for a sample page containing an excerpt from the second inaugural address by Abraham Lincoln. She wants you to create an elastic layout for the Web page so that it appears the same for different font sizes. Figure 4-78 shows a preview of the page you'll design for her.

Figure 4-78 Lincoln page

Give Me Liberty or Give Me Death
Patrick Henry

Ain't I a Woman?
Sojourner Truth

A House Divided
Abraham Lincoln

The Gettysburg Address
Abraham Lincoln

The Second Inaugural
Abraham Lincoln

Cross of Gold
William Jennings Bryan

The Man in the Arena
Theodore Roosevelt

The Only Thing We Have to Fear
Franklin Roosevelt

A Date Which Will Live in Infamy
Franklin Roosevelt

Old Soldiers Never Die
Douglas MacArthur

Inaugural Address
John Kennedy

Ich Bin Ein Berliner
John Kennedy

The Ballot or the Bullet
Malcolm X

I Have a Dream
Martin Luther King, Jr.

A Time for Choosing
Ronald Reagan

Tear Down This Wall
Ronald Reagan

Lincoln's Second Inaugural

THE ALMIGHTY HAS HIS OWN PURPOSES. "WOE UNTO THE WORLD BECAUSE OF offenses! For it must needs be that offenses come; but woe to that man by whom the offense cometh." If we shall suppose that American slavery is one of those offenses which, in the providence of God, must needs come, but which, having continued through his appointed time, he now wills to remove, and that he gives to both North and South this terrible war, as the woe due to those by whom the offense came, shall we discern therein any departure from those divine attributes which the believers in a living God always ascribe to him?

Fondly do we hope — fervently do we pray — that this mighty scourge of war may speedily pass away. Yet, if God wills that it continue until all the wealth piled by the bondsman's two hundred and fifty years of unrequited toil shall be sunk, and until every drop of blood drawn by the lash shall be paid by another drawn with the sword, as was said three thousand years ago, so still it must be said, "The judgments of the Lord are true and righteous altogether."

With malice toward none; with charity for all; with firmness in the right, as God gives us to see the right, let us strive on to finish the work we are in; to bind up the nation's wounds; to care for him who shall have borne the battle, and for his widow, and his orphan — to do all which may achieve and cherish a just and lasting peace among ourselves, and with all nations.

Complete the following:

1. In your text editor, open the **historytxt.css** and **lincolntxt.htm** files from the **tutorial.04\case1** folder. Enter **your name** and **the date** in the comment section of each file. Save the files as **history.css** and **lincoln.htm**, respectively.
2. Return to the **lincoln.htm** file in your text editor and take some time to review the content and structure of the file. Link the document to the **history.css** style sheet. Close the file, saving your changes.

3. Go to the **history.css** file in your text editor. Create a style rule to display the `header`, `section`, and `nav` elements as blocks.
4. Set the default padding and margin space for every element to 0 pixels.
5. Define a style rule for the `header` element to: a) set the background color to the value (51, 51, 51); b) center the contents of the `header` element; and c) set the width to 55 em. Set the height of the inline image within the header to 4 em.
6. Float the navigation list on the left page margin, setting the width to 15 em and the background color to the value (51, 51, 51).
7. For list items within the navigation list, create a style rule to: a) set the typeface to Century Gothic or sans-serif; b) set the font size to 0.7 em; c) remove the list markers; d) set the line height to 1.4 em; and e) set the left and bottom margins to 1 em and 1.2 em, respectively.
8. For hypertext links within the navigation list, set the text color to the value (212, 212, 212) and remove the underlining. When the user hovers the mouse pointer over these links, change the text color to white.
9. For the speech section of the page, create a style rule to: a) set the background color to the value (212, 212, 212); b) set the width to 40 em and float the section on the left; and c) display the text in a Palatino Linotype, Book Antiqua, Palatino, or serif font.
10. For the `h1` heading within the speech section, create a style rule to: a) set the background color to the value (51, 51, 51); b) set the text color to the value (212, 212, 212) and the font size to 2 em; and c) center the text.
11. For the paragraphs within the speech section, set the font size to 0.9 em and the margin size to 1 em.

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12. Annie wants to create a drop-cap effect for the first letter in the first line of the first paragraph in the speech section. Using the `first-of-type` pseudo-class and the `first-letter` pseudo-element in your style rule selector, create this drop cap by: a) floating the first letter on the left; b) setting the font size and line height to 4 em and 0.8 em, respectively; c) setting the right margin to 0.3 em; d) setting the right and bottom padding to 0.2 em; and e) adding a solid black border 0.02 em in width to the right and bottom edge of the letter.
13. Display the text of the first line of the first paragraph in the speech section in uppercase letters.
14. Next, you'll create the irregular line wrap shown in Figure 4-78. Stack the 10 slices of the Lincoln image by creating a style rule for the inline image elements within the speech section to: a) float each image on the right once the right margin is clear; and b) set the height of each image to 4 em.
15. Add appropriate style comments to your file to document your work and then save your changes.
16. Open the **lincoln.htm** file in your Web browser. Verify that the layout resembles that shown in Figure 4-78. (Note: Safari for the Macintosh does not at the time of this writing support the `first-line` pseudo-class with uppercase letters. Also, you might notice a slight difference in the layout with browsers running on the Macintosh, iPhone, or iPad.)
17. Using the Options or Preferences dialog box of your browser, increase and decrease the browser's default font size. Verify that as the font size changes, the layout and size of the inline images in the page change in proportion.
18. Submit your completed files to your instructor, in either printed or electronic form, as requested.

Apply your knowledge of CSS to create a fixed layout design for a pizzeria Web site.

CHALLENGE

Case Problem 2

Data Files needed for this Case Problem: modernizr-1.5.js, notice.png, pizzatxt.css, rblogo.png, redballtxt.htm, redbar.png, slice.png, toppings.png

Red Ball Pizza Alice Nichols is the owner of Red Ball Pizza, a well-established pizzeria in Ormond Beach, Florida. She's asked for your help in creating a design for the company's Web site. After discussing the issue with Alice, you settle on a fixed width layout. Alice has created a sample home page for you to work on. She's already created all of the content and the graphics. She needs your help with the design. Figure 4-79 shows a preview of the page you'll create for her.

Figure 4-79 Red Ball Pizza

The screenshot shows a fixed-width layout for the Red Ball Pizza website. At the top, there is a navigation bar with five tabs: Home (highlighted with a red background), Menu, Locations, Catering, and About Us. Below the navigation bar is a sidebar on the left containing links to various menu categories: Pizza, Salad, Pasta, Sandwiches, Appetizers, Pocket Pizzas, Fish & Shrimp, Chicken & Wings, Beverages, Dessert, Catering, Download Menu, and Catering Menu. The main content area features a large image of a pizza on the right. To the left of the image is a text block: "At Red Ball Pizza, we want to satisfy every appetite. That's why our menu contains a variety of different items. With so many choices, everyone's favorites are available!" Below this is another text block: "Red Ball Pizza is NOT a franchise, a chain, or a corporation. It is 100% locally owned and operated. Red Ball Pizza is devoted to providing the highest quality and the best service possible. Our only goal is to provide you with a great pizza ... EVERY TIME!" At the bottom of the main content area are six promotional boxes arranged in two rows of three. The top row contains boxes for "CLASSIC COMBO", "PIZZA & STIX", and "1/2 PRICE". The bottom row contains boxes for "PIZZA & WINGS", "\$3.00 OFF", and "SUB DINNER". Each promotional box includes a brief description, a price, and an expiration date (Expires 3/14). To the right of the main content area are several pink callout boxes with interesting facts about pizza. At the very bottom of the page is a footer with the address "Red Ball Pizza • 811 Beach Drive • Ormond Beach, FL 32175 • (386) 555 - 7499".

Complete the following:

1. In your text editor, open the **pizzatxt.css** and **redballtxt.htm** files from the **tutorial.04\case2** folder. Enter **your name** and **the date** in the comment section of each file. Save the files as **pizza.css** and **redball.htm**, respectively.

2. Return to the **redball.htm** file in your text editor. Take some time to review the content and structure of the document, and then link the file to the **pizza.css** style sheet. Close the file, saving your changes.
3. Go to the **pizza.css** file in your text editor. Create a style rule to display the **header**, **section**, **aside**, **footer**, and **nav** elements as blocks.
4. Set the default padding and margin size to 0 pixels.
5. Create a style for the **body** element to: a) set the background color to red; and b) set the font family to Verdana, Geneva, or sans-serif.
6. The entire content of the page has been enclosed in a **div** container element with the id *container*. Create a style rule for this container to: a) set the width to 1000 pixels; b) center the container in the browser window by setting the top/bottom margins to 0 pixels and the left/right margins to auto; c) display a 1-pixel solid black border on the left and right edges; and d) set the background color to white and display the *redbar.png* image file as the background image, placing the image file in the top-left corner of the container and tiling it in the vertical direction only.
7. Change the background color of the **header** element to white and set its height to 100 pixels.
8. Create a style rule for the horizontal navigation list to: a) set the height to 70 pixels and the width to 100%; and b) set the background color to white.
9. For each list item within the horizontal navigation list, create a style rule to: a) set the background color to white; b) set the font size to 16 pixels, the height and the line height to 50 pixels, and the width to 180 pixels; c) display the item as a block and float it on the left; d) set the left and right margins to 5 pixels; and e) horizontally center the contents.
10. For each hypertext link within a list item in the horizontal navigation list, create a style rule to: a) display the link as a block; b) set the background color to red and the text color to white; c) create elongated corners with a horizontal radius of 30 pixels and a vertical radius of 25 pixels (use progressive enhancement to support browser extensions); and d) remove the text underlining. If a user hovers a mouse pointer over these links, change the background color to the value (255, 101, 101) and the text color to black.
11. Create a style rule for the vertical navigation list to: a) float it on the left only when the left margin is clear; and b) set the width to 200 pixels.
12. For list items within the vertical navigation list, create a style rule to: a) remove the list item marker; b) indent the text 20 pixels; and c) set the top and bottom margins to 20 pixels.
13. For hypertext links within the vertical navigation list, set the text color to white and remove the text underlining. When a user hovers the mouse pointer over these links, change the text color to black.
14. The main content of the Web page is contained in a **section** element with the id *main*. Create a style rule for this element to: a) change the background color to the value (255, 211, 211); b) float the element on the left; and c) set the width to 600 pixels.
15. For paragraphs that are direct children of the main section, set the font size to 20 pixels and the margin to 15 pixels.

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16. For inline images within the main section, create a style rule to: a) float the image on the right; b) set the margin to 15 pixels; c) set the width to 350 pixels; and d) set the radius of the bottom-left corner to 350 pixels (use progressive enhancement to support the Mozilla and WebKit browser extensions).
17. Alice has included six coupons in the home page that have been nested within `div` elements belonging to the `coupon` class. For each `coupon` `div` element: a) add a 5-pixel dashed black border; b) float the coupons on the left; c) set the width to 170 pixels and the height to 150 pixels; and d) set the top and bottom margins to 20 pixels, and the left and right margins to 10 pixels.
18. To the style rule for the coupons, add style properties to create the following two background images: a) place the `slice.png` image in the center of the coupon without tiling; and b) place the `notice.png` image in the bottom-right corner of the coupon without tiling. Set the background color of the coupon to white.
19. For `h1` headings within the coupons, add a style rule to: a) set the text color to white on a background with the color value (192, 0, 0); b) set the font size to 16 pixels and the kerning to 2 pixels; c) center the text; d) set the height to 25 pixels; and e) display the text in small caps.
20. For paragraphs within the coupons, create a style rule to: a) set the font size to 14 pixels; b) center the text; and c) set the margin to 5 pixels.
21. Alice has placed interesting tidbits about pizza in an `aside` element. Float the `aside` element on the left with a width of 200 pixels.
22. For `h1` headings within the `aside` element, create a style rule to: a) set the text color to the value (192, 0, 0); b) set the font size to 20 pixels and the kerning to 2 pixels; c) set the font weight to normal; and d) center the text of the headings.
23. For list items within the `aside` element, create a style rule to: a) set the background color to the value (255, 135, 135); b) add round corners with a 5-pixel radius; c) set the text color to black; d) remove the list style marker; and e) set the margin to 10 pixels and the padding to 5 pixels.
24. Display the `footer` element when the left margin is clear, and set the size of the left margin to 200 pixels.
25. For the `address` element within the `footer` element, create a style rule to: a) add a 1-pixel solid red border to the top of the element; b) change the text color to red; c) set the font size to 10 pixels, set the font style to normal, and center the address text; and d) set the top margin to 25 pixels and the bottom padding to 20 pixels.
26. Add style comments throughout your style sheet to document your work and then save your changes.
27. Open the `redball.htm` file in your Web browser and verify that the design and layout resemble that shown in Figure 4-79.
28. Submit your completed files to your instructor, in either printed or electronic form, as requested.

Explore how to use CSS to create an interactive map with popup boxes.

CHALLENGE

Case Problem 3

Data Files needed for this Case Problem: `bluebar.png`, `image0.jpg–image9.jpg`, `longstxt.htm`, `lpmap.jpg`, `maptxt.css`, `modernizr-1.5.js`

Longs Peak Interactive Map Longs Peak is one of the most popular attractions of Rocky Mountain National Park (RMNP). Each year during the months of July, August, and September, thousands of people climb Longs Peak by the Keyhole Route to reach the 14,255-foot summit. Ron Bartlett, the head of the RMNP Web site team, has asked for your help in creating an interactive map of the Keyhole Route. The map will be installed at electronic kiosks in the park's visitor center. Ron envisions a map with 10 numbered waypoints along the Keyhole Route, displaying a popup photo and description when a mouse pointer hovers over one of the numbered points. Figure 4-80 shows a preview of the online map with the first waypoint highlighted by the user.

Figure 4-80

Longs Peak interactive map

Home Page

Black Canyon Map

Black Lake Map

Continental Divide Map

Estes Cone Map

Flattop Map

Meeker Map

Odessa Map

Longs Peak Map

Lumpy Ridge Map

Petit Grepon Map

Sky Pond Map

Trail Ridge Road Map

Twin Sisters Map

Longs Peak Interactive Map

At 14,255 feet, Longs Peak towers above all other summits in Rocky Mountain National Park. The summer is the only season in which the peak can be climbed by a non-technical route. Early mornings break calm, but clouds build in the afternoon sky, often exploding in storms of brief, heavy rain, thunder and dangerous lightning. Begin your hike early, way before dawn, to be back below timberline before the weather turns for the worse.

The Keyhole Route, Longs Peak's only non-technical hiking pathway, is a 16 mile round trip with an elevation gain of 4,850 feet. Though non-technical, the Keyhole Route is still challenging and is not recommended for those who are afraid of heights or exposed ledges. Hikers should be properly outfitted with clothing, food, and water. Use caution when ascending or descending steep areas. Don't be afraid to back down when bad weather threatens.

Move your mouse pointer over the numbered landmarks in the map to preview the hike.

Complete the following:

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1. Open the **longstxt.htm** and **maptxt.css** files in your text editor. Add **your name** and **the date** to the comment section of each file, and save the files as **longs.htm** and **map.css**, respectively.
2. Return to the **longs.htm** file in your text editor. Take some time to study the content and structure of the document. Link the file to the **map.css** style sheet and then close the file, saving your changes.
3. Go to the **map.css** style sheet.
4. Create a style rule to display the **nav**, **section**, **figure**, and **figcaption** elements as blocks.
5. The estimated time that a hiker should arrive at each waypoint has been marked with the **time** element. Create another style rule to display the **time** element inline.
6. Set the margin and padding space of every element to 0 pixels.
7. Set the font family for the page body to Verdana, Geneva, or sans-serif.
8. The entire content of the page is nested within a **div** element with the id **page**. Create a style rule for this element to: a) set the background color to the value (255, 255, 128) and display the background image file, *bluebar.png*, tiled vertically along the left edge; b) add a ridged 15-pixel-wide border with a color value of (70, 76, 222); c) add rounded corners with a radius of 50 pixels; d) set the width and height to 900 pixels and 750 pixels, respectively; and e) horizontally center the **div** element within the browser window, setting its top margin to 10 pixels, setting its bottom margin to 200 pixels, and using **auto** for the left and right margins.
9. Float the vertical navigation list on the left margin with a width of 230 pixels. For each list item within the navigation list, remove the list markers, set the top and bottom margins to 25 pixels, and set the left and right margins to 20 pixels. Set the font color of hypertext links within the navigation list to white, and to yellow in response to the **hover** event. Remove the underlining from the hypertext links.
10. The description of the map is contained within the **section** element with the id **summary**. Float the summary section on the left with a left margin of 30 pixels and a width of 600 pixels.
11. Create a style rule for the **h1** heading within the summary section to: a) set the text color to the value (70, 76, 222); b) set the font size to 24 pixels, with normal weight and kerning set to 5 pixels; and c) set the margin to 20 pixels.
12. For paragraphs within the summary section, set the margin to 10 pixels.
13. The interactive map has been enclosed in a **section** element with the id **map**. For the map section, create a style rule to: a) place it using relative positioning (do not specify the top or left coordinate); b) set the background color to white, with the *lpmapp.jpg* image file as the background image placed in the top-left corner with no tiling; c) add a 1-pixel-wide solid black border; d) float the section on the left with a left margin of 30 pixels; and e) set the width and height to 600 pixels and 294 pixels, respectively.

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14. Each of the popup boxes has been placed within a figure box. Initially, these popup boxes should be clipped so that only the number is shown. Create a style rule for the `figure` element to: a) set the background color to the value (70, 76, 222); b) set the text color to white; c) set the width to 150 pixels; d) add rounded corners with a radius of 15 pixels; e) position the figure box using absolute positioning (but do not specify a top or left coordinate); f) set the z-index value to 1; and g) clip the content using a clipping rectangle that is 20 pixels wide by 20 pixels high and situated in the top-left corner of the figure box.
15. If a user hovers the mouse pointer over a figure box, then remove the clipping rectangle and increase the z-index value to 2 (so that it appears on top of other objects).
16. For the figure caption within each figure box, set the font size to 12 pixels and the margin to 10 pixels.
17. Set the text color of each `time` element within each figure box to yellow.
18. Each of the 10 figure boxes has an id, ranging from `point0` to `point9`. Set the (left, top) coordinates of the figure boxes as follows:
 - point0 at (560, 60)
 - point1 at (277, 90)
 - point2 at (175, 0)
 - point3 at (110, 115)
 - point4 at (55, 165)
 - point5 at (5, 180)
 - point6 at (15, 222)
 - point7 at (50, 245)
 - point8 at (100, 245)
 - point9 at (90, 220)
19. Save your changes to the file and then open `longs.htm` in your Web browser. Verify that the placement of the waypoints follows the locations shown in Figure 4-80. Confirm that when you hover your mouse over each of the 10 waypoints, a description of the waypoint appears on the top of the trail map.
20. Submit your completed files to your instructor, in either printed or electronic form, as requested.

Test your knowledge of CSS to design the layout for the front page of a local newspaper.

CREATE

Case Problem 4

Data Files needed for this Case Problem: **address.txt**, **blake.jpg**, **cougar.jpg**, **links1.txt**, **links2.txt**, **modernizr-1.5.js**, **papertxt.css**, **parch.jpg**, **parch2.jpg**, **parktxt.htm**, **pcglogo.jpg**, **story1.txt–story4.txt**

The Park City Gazette Park City, Colorado, is a rural mountain community noted for its ski slopes and fishing holes. Kevin Webber is the editor of the weekly *Park City Gazette*. The paper recently redesigned its printed layout, and Kevin wants you to do the same thing for the online version. He's prepared several files containing sample text from recent articles and a few lists of links that usually appear in the front page of the newspaper's Web site. He's also provided you with image files that can be used for the paper's logo and background. Your job will be to use all of these pieces to create a sample Web page for him to evaluate.

Complete the following:

1. Use your text editor to open the **parktxt.htm** and **papertxt.css** files from the **tutorial.04\case4** folder. Add **your name** and **the date** in the comment section of each file. Save the files as **park.htm** and **paper.css**, respectively.
2. Using the content of the address, links, and story text files, create the content and structure of the *park.htm* file. You are free to supplement the material in these text files with additional content of your own if appropriate. Use the **#** symbol for the value of the **href** attribute in your hypertext links because you will be linking to pages that don't actually exist.
3. Link the *park.htm* file to the **paper.css** style sheet file and then save your changes.
4. Go to the **paper.css** style sheet file and create a layout for your *Park City Gazette* sample page. The layout should be based on a fluid design that will render well on page widths from 1000 up to 1400 pixels.
5. The specifics of the page design are up to your imagination and skill, but must include the following features:
 - use of the **display** property
 - application of **width** and **height** style properties
 - floated elements and cleared elements
 - defined margin and padding spaces as well as maximum and minimum widths
 - border styles
 - rounded or elongated corners
 - use of progressive enhancement along with one or more browser style extensions
 - a tiled or non-tiled background image
 - an example of relative or absolute positioning
6. Test your layout and design on a variety of devices, browsers, and screen resolutions to ensure that your sample page is readable under different conditions.
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7. Submit your completed files to your instructor, in either printed or electronic form, as requested.

ENDING DATA FILES

