HTML 214

HTML and CSS | Tutorial 3 Designing a Web Page with CSS

Apply your knowledge of CSS text and color styles to format a Web page for a cryptographic institution.

Case Problem 1

Data Files needed for this Case Problem: algo.htm, cjayout.css, c.stylestxt.css, crypttxt.htm, enigma.htm, history.htm, locks.jpg, logo.gif, modernizr-1.5.js, public.htm, Q-scytale.gif, single.htm

International Cryptographic Institute Sela Dawes is the media representative for the ICI, the International Cryptographic Institute. The ICI is an organization of cryptographers who study the science and mathematics of secret codes, encrypted messages, and code breaking. Part of the IQ's mission is to inform the public about cryptography and data security. Sela has asked you to work on a Web site containing information about cryptography for use by high school science and math teachers. She wants the design to be visually interesting in order to help draw students into the material. Figure 3-62 shows a preview of your design.

Figure 3-62

Cryptography home page

THE SCIENCE OF CRYPTOGRAPHY What is Cryptography? Cryptography is the science of secure communications, formed from the Greek words krypfbs meaning "hidden" and l6gos, meaning "word." the first recorded use of cryptography was by the Spartans who as early as 400 BC employed a cipher device caDed a scytale to send secret communications between military commanders. The scytale consisted of a tapered baton around which was wrapped a piece of parchment inscribed with the message. Once unwrapped the parchment appeared lo contain an incomprehensible set of letters; however when wrapped around another baton of identical size the original text appears. Cryptographers developed more and more ingenious systems, but it was in the 20" Century that the science of cryptography took off. The first major achievement was the development of rotor cipher machines. An American, Edward Hebem recognized that by hardwiring alphabetic substitution in the connections from one side of an electrical rotor lo lhose on the other side and cascading a collection of such rotors, alphabetic substitutions of almost any complexity could be produced. German engineers independently discovered the rotor concept and designed the precursors to the most famous cipher machine in history - the German Engingma Machine which was used during World War II. The cracking of the Enigma ciphers by British and Polish cryptanalysts Is one of the greatest triumphs In the history of cryptography and played an Important role in the Allied victory. To learn more cryptography, please lour life site.

Complete the following:

- In your text editor, open the crypttxt.htm and c_stylestxt.css files from the tutorial.03\casel folder included with your Data Files. Enter your name and the date in the comment section of each file. Save the files as crypt.htm and c_styles.css respectively.
- 2. Co to the crypt.htm file in your text editor, and review the contents and structure of the document. Link the file to the cjayout.css style sheet.

- 3. Locate the three strong elements in the two paragraphs and add the class attribute to each element with the class value set to keyword.
- 4. Locate the *locks.jpg* inline image, and below' the image create an image map w'ith the name locks. Add the following hotspots to the image map:
 - a. A circular hotspot linked to the history.htm file, centered at the coordinates (52, 52) with a radius of 43 pixels; the alternate text should be History.
 - A circular hotspot with a radius of 43 pixels located at the coordinates (155, 52);
 link the hotspot to the enigma.htm file, and with the alternate text set to Enigma.
 - c. A circular hotspot with a radius of 43 pixels located at the coordinates (255, 52); link the hotspot to the algo.htm file and set the alternate text to Algorithms.
 - d. A circular hotspot with a radius of 43 pixels located at the coordinates (355, 52); link the hotspot to the single.htm file and set the alternate text to Single Key.
 - e. A circular hotspot with a radius of 43 pixels located at the coordinates (455, 52); link the hotspot to the public.htm file and set the alternate text to Public Key.
- 5. Apply the locks image map to the locks.jpg inline image.
- 6. Save your changes to the crypt.htm file.
- 7. Co to the c_styles.css style sheet file in your text editor. Set the color of the page body background and text to black and white, respectively. Set the default font to a list consisting of Century Gothic followed by a generic sans-serif font.
- 8. Add a style rule for hi headings nested w'ithin a header element to: a) display the text in yellow; b) use Courier New, Courier, or another monospace font; c) set the font size to 28 pixels w'ith a kerning of 20 pixels; and d) center the text.
- 9. Add a style rule for h2 headings nested within an article element to: a) set the font size to 24 pixels; b) display the text without boldface; and c) set the kerning to 5 pixels.
- 10. Align paragraph text within the article element using full justification.
- 11. For strong elements belonging to the keyword class, create a style rule that displays the text in a yellow, non-bold font.
- 12. Center the contents of paragraphs nested within the footer element.
- ^EXPLORE |3 you don't want image maps to appear with a colored border. To remove the border, create a style rule for inline images that contain the usemap attribute and set the border wridth to 0 pixels.
 - 14. Document your work with style comments and then save your changes to the file.
 - 15. Return to the crypt.htm file in your text editor and link the file to the c_styles.css
 - 16. Open crypt.htm in your Web brow'ser and confirm that it matches the design shown in Figure 3-62.
 - 17. Submit your completed files to your instructor, in either printed or electronic form, as requested.

Apply your knowledge of CSS to design a Web page for a bike louring company.

PLY

Case Problem 2

Data Files needed for this Case Problem: bmtourtxt.htm, modernizr-1.5.js, mwlayout.css, mw_stylestxt.css, mwlogo.png, wheelmarker.png

Mountain Wheels Adriana and Ivan Turchenko are the co-owners of Mountain Wheels, a bike shop and touring agency in Littleton, Colorado. One of their most popular tours is the Bike the Mountains Tour, a six-day excursion over some of the highest roads in Colorado. Adriana wants to update the company's Web site to provide more information about the Bike the Mountains Tour. She already has had a colleague design a three-column layout with a list of links in the first column and descriptive text in the second and third columns. She has asked for your help in completing the design by formatting the text and colors in the page. Figure 3-63 shows a preview of the Web page you'll create.

Figure 3-63

Bike the Mountains page

0 Mountain Wheels 0

Home O Learn More Testimonials Route Maps Register

Bike the Mountains Tour

THE BIKE THE MOUNTAINS TOUR RISES from the town of Littleton, Colorado and explores the Colorado Front Range. Our tour crosses the Continental Divide twice, giving you the opportunity to bike the highest paved roads in the United States. This tour is a classic showcase of Colorado's Rocky Mountain scenery.

Not designed for the weekend cyclist, this tour is offered only for those fit enough to ride high mountain passes. We

"The Bike the Mountains Tour is amazing. I highly recommend it and would gladly return."

provide sag wagons and support. Your lodging and meals are also part of the registration fee. We guarantee tough climbs, amazing sights, sweaty jerseys, and lots of fun.

This is the seventh year we've offered the Bike the Mountains Tour. It is our most popular tour and riders are returning again and again. Our experienced tour leaders will be there to guide, help, encourage, draft, and lead you every stroke of the way. Come join us!

Itinerary

Wr start from Ute footballs above LilliHbti, Colorado, promptly at 9am. The fust day s a chance to yet your tegs m shape, test your yeonng, arid prepare for what's to come

Day

Day ? starts wfti a dimh up Bear Creek Canyon to too tou Mountain, fotowed try a swift and vinding descent into the town of Golden. Refrest yuuisetf at the famous Coon Brewery.

Day 3

Day 3 takes you dteoq die Peak to Peak Highway. This 55-mlle route showcases the mountains of the Front Range, providing amazing vistas horn Golden Gate canyon State Park to Rocky Mutotain National l'aik.

Day 4

Now for the supreme "Millenue".

Day 4 bongs some real highatitud? cyriiry) through Rocky
Mountain National Park and up
Trail Ridge, Road. It's an
anuuinq ride, high above
tunberteie. topping out at over
11,000 feet

Days

We start Day 5 on the west side of the Continental DMde. From Grand lake, yotrd take to Winter Park and then over Berthoud Pass. an>d bai k tu Ure eastern sale, at the Continental Oxide.

Day 6

On Day 6 we tide bark to
Uttfeton over Squaw Pass and
Bear Creek and then enjoy a

WWT/*^\art*24'?>^2Snx
memoies ofi great tour.

Mountain Wheels • Littleton, CO 80123 • (303) 555 - 5499

Complete the following:

- Open the bmtourtxt.htm and mw_stylestxt.css files from the tutorial.03\case2 folder. Enter your name and the date in the comment section of each file. Save the files as bmtour.htm and mw_styles.css in the same folder.
- Return to the bmtour.htm file in your text editor. Link the file to the mwjayout.css style sheet. Take some time to review the contents and structure of the document.
- 3. You need to name different elements within the document using the id attribute. Add the following ids to the document: a) name the first header element pageheader and the second header element articleheader; and b) name the first section element leftsection and the second section element rightsection.
- Save your changes to the tile and then go to the mw styles.css style sheet in your text editor.
- 5. Set the default font for the page body to a font list containing **Tahoma**, **Geneva**, and **sans-serif**.
- 6. For the articleheader id, apply a style rule that: a) sets the font size to 18 pixels and removes boldface; b) sets the kerning to 7 pixels; and c) centers the text.
- 7. Set the background color of the navigation list to the value (12S, 120, 89) and set the line height to 3em. Remove the bullet markers from the navigation list.
- For hypertext links within the navigation list, create a style rule that: a) sets the font color to white for older browsers, and to white with 50% opacity for newer browsers; and b) removes the underlining from the link text.
- EXPLORE 9 when a user hovers the mouse pointer over list items in the navigation list, change the background color to the value (131,121,36) and display the image file wheelmarker.png as the bullet image. When a user hovers the mouse pointer over a hypertext link in the navigation list, change the font color to yellow for older browsers, and to white with 100% opacity for newer browsers.
 - 10. For paragraphs that are direct children of the leftsection id, set the font size to 22 pixels. Also, for the first paragraph that is also a direct child of the leftsection id, display the first line of the paragraph in uppercase.
 - 11. For the blockquote element, create a style rule to set: a) the background color to (131,121, 36); b) the font color to white; c) the font size to 16 pixels; and d) the font family to Comic Sans MS, Times, and cursive.
- EXPLORE 12. For paragraphs within the blockquote element, create styles to insert a double quotation mark directly before and after the text of the paragraph.
 - 13. For hI headings within the rightsection id, create a style rule to: a) set the font size to 22 pixels and the kerning to 3 pixels; b) remove the boldface from the text; and c) center the text. For h2 headings within the rightsection id, create a style rule to: a) set the font size to 18 pixels; b) right-align the text; and c) remove the boldface from the text. Finally, for paragraphs within the rightsection id, create a style rule to: a) set the font color to gray; b) set the font size to 14 pixels; and c) justify the text.
 - 14, For address elements within the page footer, create a style rule to: a) set the font size to 16 pixels; b) remove the italic style from the address; and c) center the text.
 - 15. Add style comments to document your work and then save your changes to the file.
 - Return to the bmtour.htm file in your text editor and link that file to the mw_styles.css style sheet.
 - Open the bmtour.htm file in your Web browser and confirm that it matches the design and layout shown in Figure 3-63.
 - Submit your completed files to your instructor, in either printed or electronic form, as requested.