Practice

Review Assignments

Practice the skills you learned in the tutorial using the same case scenario.

Data File needed for the Review Assignments: logo.jpg

Dave has found a host for his Web page and has published the document you helped him create on the Internet. He wants to start adding more pages to his Web site. He's come to you for help in creating a page describing his basic stick. He's already written the text for the Web page; he needs you to translate that text into HTML code. Figure 1-42 shows a preview of the page you'll create for Dave.

Figure 1-42



The Basic Stick

The Basic Stick is the perfect stick for beginners. The stick rotates slowly to provide extra time for performing stick tricks, but is flashy enough to impress your

Patented Dura-Coat® finish ensures sticks can withstand all weather conditions. More durable than other sticks, these props will keep looking like new for as long as you own them.

Enhanced stick flexibility provides more bounce, allowing for better tricks. A soft rubber core adds a whole new element to the sticking experience

Full customization will give you the chance to own a pair of sticks unlike any others out there. I make exactly what you want, with your colors and

A personal touch through both my customization options and hand-crafted designs.

Specifications

- Main Stick
 - o Weight 7 oz.
 - o Length: 24 inches
 - o Tape: Dura-Coat® finish with laser-style color choices
- Handle Sticks (one pair)
 - o Weight 2 oz.
 - o Length: 18 inches
 - o Tape: Soft ivory tape with rubber core

Dave's Devil Sticks ♦ 541 West Highland Dr. ♦ Auburn, ME 04210 ♦ (207) 555 - 9001

Complete the following:

- 1. Use your text editor to create a new file named basic.htm, and save it in the tutorial.01\review folder included with your Data Files.
- 2. Within the basic.htm file, insert the structure of the HTML file, including the head and body sections.
- 3. Within the head section, insert a comment containing

Dave's Devil Sticks

Basic Stick

Author: your name

Date: the date

where your name is your name and the date is the current date.

Tutorial Summary

Review

In this tutorial you learned how to create a basic Web page using HTML. The tutorial began by examining concepts and history surrounding networks and the development of the World Wide Web. It then explored the history of HTML, explaining how the development of HTML was a key component in the development of the Web. The first session concluded with the creation of a simple Web page consisting only of the page head. Work on designing the page body began in the second session by first exploring how to mark block-level elements. The discussion of block-level elements included work with headings, paragraphs, block quotes, and lists. The second session concluded with coverage of inline elements and discussed the issue of physical elements versus logical elements. The third session began by exploring element attributes, showing how to use the style attribute to center the contents of a block-level element. Because Web pages often need to display nontextual content, the third session then examined how to use empty elements such as line breaks, horizontal rules, and inline images. The session and the tutorial concluded by discussing character sets and explored how to insert special character symbols into a Web page.

Key Terms

ARPANET **ASCII** attribute block-level element body element character encoding character entity reference character formatting element character set client client-server network closing tag comment tag definition list deprecated element empty element Extensible Hypertext Markup Language Extensible Markup Language extensions file server head element heading element host HTML

HTML 5.0 HTML converter HTML editor hypertext Hypertext Markup Language inline element inline image Internet Service Provider ISO-8859-1 **ISP** LAN Latin-1 link local area network logical element markup language network node numeric character reference one-sided tag opening tag ordered list physical element presentational attribute print server

root element server SGMI Standard Generalized Markup Language style tag text-based browser two-sided tag Unicode unordered list UTF-8 W3C WAN Web Web browser Web page Web server white space wide area network World Wide Web World Wide Web Consortium XHTML XHTML 2.0 XHTML 5.0 **XML**

- 4. Add the page title Basic Sticks to the head section.
- 5. Within the body section, insert an h1 heading centered horizontally on the page and containing the inline image file **logo.jpg**, located in the tutorial.01\review folder included with your Data Files. Specify the following alternate text for the image: **Dave's Devil Sticks: The Basic Stick**.
- 6. Add two h2 headings containing the text **The Basic Stick** and **Specifications**. Set the font color of the heading 2 text to red.
- 7. Directly below the first h2 heading, insert a paragraph containing the text: The Basic Stick is the perfect stick for beginners. The stick rotates slowly to provide extra time for performing stick tricks, but is flashy enough to impress your friends.
- 8. Directly below the paragraph but above the second h2 heading, insert a block quote that contains the following:
 - a. Place a horizontal rule at the top and the bottom of the block quote.
 - b. Between the two horizontal rules, insert the following four paragraphs:

Patented Dura-Coat finish ensures sticks can withstand all weather conditions. More durable than other sticks, these props will keep looking like new for as long as you own them.

Enhanced stick flexibility provides more bounce, allowing for better tricks. A soft rubber core adds a whole new element to the sticking experience that you have to feel to believe!

Full customization will give you the chance to own a pair of sticks unlike any others out there. I make exactly what you want, with your colors and your designs.

A personal touch through both my customization options and hand-crafted designs.

- c. Change the first few words of each of the four paragraphs to a bold font, as indicated in Figure 1-42.
- 9. Directly below the second h2 heading, insert an unordered list. The list should contain two items: **Main Stick** and **Handle Sticks (one pair)**.
- Directly below the Main Stick list item, insert an unordered list containing the following items:

Weight: 7 oz. Length: 24 inches

Tape: Dura-Coat finish with laser-style color choices

11. Directly below the Handle Sticks (one pair) list item, insert an unordered list containing:

Weight: 2 oz. Length: 18 inches

Tape: Soft ivory tape with rubber core

- 12. Locate the two occurrences of "Dura-Coat" in the document. Directly after the word "Dura-Coat," insert the registered trademark symbol ®. The character entity name of the ® symbol is "reg." Display the ® symbol as a superscript by placing the character within the sup inline element.
- 13. At the bottom of the body section, insert the company's address:

Dave's Devil Sticks 541 West Highland Dr. Auburn, ME 04210 (207) 555 - 9001

- 14. Center the address on the page.
- 15. Separate the different sections of the address using a solid diamond ◆ (character code 9830).
- 16. Add a horizontal rule directly above the address element.
- 17. Save your changes to the file, and then open it in your Web browser to verify that the content and layout are correct.
- 18. Submit your completed files to your instructor.

Apply

Case Problem 1

Apply your knowledge of HTML to create a Web page for a mathematics department at a university.

Data Files needed for this Case Problem: euler.jpg and eulertxt.htm

Mathematics Department, Coastal University Professor Lauren Coe of the Mathematics Department of Coastal University in Anderson, South Carolina, is preparing material for a course on the history of mathematics. As part of the course, she has written biographies of famous mathematicians. Lauren would like you to use content she's already written to create Web pages that students can access on Coastal University's Web server. You'll create the first one in this exercise. Figure 1-43 shows a preview of this page, which profiles the mathematician Leonhard Euler.

Figure 1-43



Leonhard Euler (1707-1783)

The greatest mathematician of the eighteenth century, Leonhard Euler was born in Basel, Switzerland. There, he studied under another giant of mathematics, Jean Bernoulli. In 1731 Euler became a professor of physics and mathematics at St. Petersburg Academy of Sciences. Euler was the most profife mathematican of all time, publishing over 800 different books and papers. His influence was felt in physics and astronomy as well. Euler's work on mathematical analysis. Introductio in analysin infinitorum (1748) remained a standard textbook for well over a century. For the princess of Anhalt-Dessau he wrote Lettres à une princesse d'Allemagne (1768-1772), giving a clear non-technical outline of the main physical theories of the time.

One can hardly do math without copying Euler. Notations still in use today, such as e and n, were introduced in Euler's writings. He is perhaps best known for his research into mathematical analysis. Euler's formula

$$\cos(x) + i\sin(x) = e^{(ix)}$$

demonstrates the relationship between algebra, complex analysis, and trigonometry. From this equation, it's easy to derive the equation

 $e^{(\pi i)} + 1 = 0$

which relates the fundamental constants: 0, 1, π , e, and i in a single beautiful and elegant statement.

Leonhard Euler died in 1783, leaving behind a legacy perhaps ummatched, and certainly unsurpassed, in the annals of mathematics.

Math 895: The History of Mathematics

Complete the following:

1. Open the eulertxt.htm file from the tutorial.01\case1 folder included with your Data Files. Save the file as euler.htm in the same folder.

- 2. Add opening and closing https://www.energeness.com/html tags to the file. Insert a head section and enclose Lauren's text on Euler within a body element.
- 3. Within the head section, insert a comment containing

History of Math 895: Leonhard Euler

Author: your name

Date: the date

where your name is your name and the date is the current date.

- 4. Add the page title History of Math 895: Leonhard Euler to the head section.
- 5. Directly below the opening <body> tag, insert a paragraph containing the inline image file **euler.jpg**, located in the tutorial.01\case1 folder included with your Data Files. Specify "Portrait of Leonhard Euler" as the alternative text.
- 6. Mark the next line containing "Leonhard Euler (1707 1783)" as an h1 heading.
- 7. Mark the five blocks of text describing Euler's life as paragraphs.
- 8. Mark the two equations as block quotes. Change the font color of the two block quotes to red.
- 9. Mark the name of the course title at the bottom of the file as an address.
- 10. Insert horizontal rules directly above the h1 heading and the address element.

EXPLORE

- 11. Within the first paragraph, display the names "Leonhard Euler" and "Jean Bernoulli" in boldface. Mark the phrase "800 different books and papers" as emphasized text using the em element. Mark the phrase "Introduction in analysin infinitorum" as a citation.
- 12. In the phrase, "Lettres a une princesse d'Allemagne" replace the one-letter word a with à (the character entity name is "agrave"). Mark the entire publication as a citation.
- 13. In the second paragraph, italicize the notation for e and replace "pi" with the character π (the character name is "pi").
- 14. In the first equation, italicize the letters *e*, *x*, and *i* (but do not italicize the "i" in "sin"). Display the term (*ix*) as a superscript.
- 15. In the second equation, replace "pi" with the character π . Italicize the letter e and i. Display (πi) as a superscript.
- 16. In the last paragraph, italicize the notations for e and i and replace "pi" with π .
- 17. Save your changes to the file, and then verify that the page appears correctly in your Web browser.
- 18. Submit your completed files to your instructor.

Apply

Case Problem 2

Apply your knowledge of HTML to create a page showing text from a scene of a Shakespeare play.

Data Files needed for this Case Problem: macbeth.jpg and macbethtxt.htm

Mansfield Classical Theatre Steve Karls is the director of Mansfield Classical Theatre, a theatre company for young people located in Mansfield, Ohio. This summer the company is planning to perform the Shakespeare play Macbeth. Steve wants to put the text of the play on the company's Web site and has asked for your help in designing and completing the Web page. Steve wants to have a separate page for each scene from the play. A preview of the page you'll create for Act I, Scene 1 is shown in Figure 1-44. Steve has already typed the text of the scene. He needs you to supply the HTML code.

Figure 1-44



ACT I

SCENE 1.

Summary A thunderstorm approaches and three witches convene. They agree to confront the great Scot general Macbeth upon his victorious return from a war between Scotland and Norway. Soon, heroic Macbeth will receive the title of Thane of Cawdor from King Duncan. However, Macbeth learns from the witches that he is fated for greater things and he will be led down to the path of destruction by his unquenchable ambition.

A desert place.

Thunder and lightning. Enter three Witches.

First Witch

When shall we three meet again In thunder, lightning, or in rain?

Second Witch

When the hurlyburly's done, When the battle's lost and won. Third Witch

That will be ere the set of sun.

First Witch Where the place?

Second Witch

Upon the heath.

Third Witch

There to meet with Macbeth.

First Witch

I come, Graymalkin! Second Witch

Paddock calls.

Third Witch

Anon. ATT.

> Fair is foul, and foul is fair. Hover through the fog and filthy air.

Exeunt

Go to Scene 2 =

Text provided by Online Shakespear

Complete the following:

- 1. Open the macbethtxt.htm file from the tutorial.01\case2 folder included with your Data Files. Save the file as macbeth.htm in the same folder.
- 2. Enclose the entire Macbeth text within the structure of an HTML document.
- 3. Within the head section, insert a comment containing the following text:

Macbeth: Act I, Scene 1

Author: your name

Date: the date

- 4. Add the page title Macbeth: Act I, Scene 1 to the head section.
- 5. Directly below the opening <body> tag, insert an h1 heading containing the inline image file macbeth.jpg (located in the tutorial.01\case2 folder included with your Data Files) with Macbeth as the alternate text for nonvisual browsers. Add a horizontal rule directly below the h1 heading.
- 6. Mark the text "ACT I" as an h2 heading. Mark "SCENE 1." as an h3 heading.

- 7. Mark the summary of the scene as a paragraph. Display the word "Summary" in bold.
- 8. In the text of the play, mark the descriptions of setting, scene, and exits as separate paragraphs, and italicize the text, as shown in Figure 1-44.
- EXPLORE
- 9. Mark the dialog as a definition list, with each character's name marked as a definition term and each speech marked as a definition description. Where the speech goes over one line, use a line break to keep the speech on separate lines, as shown in the figure.
- 10. Directly below the Exeunt paragraph, insert the line Go to Scene 2. Mark this line as a div element and align it with the right page margin. (Steve will mark this as a link later.) At the end of the line, insert a right arrow character using the 8658 character number. Add horizontal rules directly above and below this statement.
- EXPLORE
- 11. Mark the line "Text provided by Online Shakespeare" as a paragraph, with the text itself marked with the cite element. Align the text with the right page margin.
- 12. Save your changes to the file, and then confirm the layout and content of the page in your Web browser.
- 13. Submit the completed files to your instructor.

Challenge

Case Problem 3

Explore how to use HTML to create a recipe page.

Data Files needed for this Case Problem: dessertweb.jpg, torte.jpg, and tortetxt.htm

dessertWEB Amy Wu wants to take her love of cooking and sharing recipes to the World Wide Web. She's interested in creating a new Web site called dessertWEB where other cooks can submit and review dessert recipes. Each page within her site will have a photo and description of the dessert, the ingredients, the cooking directions, and a list of reviews. Each recipe will be rated on a 5-star scale. She already has information on one recipe: Apple Bavarian Torte. She's asked for your help in creating a Web page from the data she's collected. A preview of the completed page is shown in Figure 1-45.

Figure 1-45



Apple Bavarian Torte (★★★★)



n torte baked in a springform pan. Cream cheese, sliced almonds, and apples make this the perfect holiday treat (12 servings).

INGREDIENTS

- 1/2 cup butter
- 1/3 cup white sugar
- 1/4 teaspoon vanilla extract
- 1 cup all-purpose flour
- 1 (8 ounce) package cream cheese
- 1/4 cup white sugar
- 1 egg
- 1/2 teaspoon vanilla extract
- 6 apples peeled, cored, and sliced
- 1/3 cup white sugar
- 1/2 teaspoon ground cir
- 1/4 cup sliced almonds

DIRECTIONS

- 1. Preheat oven to 450° F (230° C).
- Cream together butter, sugar, vanilla, and flour.
- Press crust mixture into the flat bottom of a 9-inch springform pan. Set aside.
- In a medium bowl, blend cream cheese and sugar. Beat in egg and vanilla. Pour cheese mixture over crust.
- Toss apples with sugar and cinnamon. Spread apple mixture over all.
- 6. Bake for 10 minutes. Reduce heat to 400° F (200° C) and continue baking for 25 minutes.
- Sprinkle almonds over top of torte. Continue baking until lightly browned. Cool before removing from pan.

REVIEWS

I loved the buttery taste of the crust which complements the apples very nicely.

- Reviewed on Sep. 22, 2010 by MMASON.

Nothing special. I like the crust, but there was a little too much of it for my taste, and I liked the filling but there was too little of it. I thought the crunchy apples combined with the sliced almonds detracted from the overall flavor.

- Reviewed on Sep. 1, 2010 by GLENDACHEF.

Delicious!! I recommend microwaving the apples for 3 minutes before baking, to soften them. Great dessert - I'll be making it again for the

- Reviewed on August 28, 2010 by BBABS.

Complete the following:

- 1. Open the tortetxt.htm file from the tutorial.01\case3 folder included with your Data Files. Save the file as torte.htm in the same folder.
- 2. Add the structure of an HTML document around the recipe text. Within the head section, insert a comment containing the following text:

Apple Bavarian Torte

Author: your name

Date: the date

- 3. Add the page title Apple Bavarian Torte Recipe to the head section.
- 4. Directly below the opening <body> tag, insert a div element containing the inline image dessertweb.jpg located in the tutorial.01\case3 folder included with your Data Files. Specify the alternative text dessertWEB. Insert a horizontal rule directly below the div element.

EXPLORE

- 5. Mark the text "Apple Bavarian Torte" as an h2 heading.
- 6. Change the text "(4 stars)" to a set of 4 star symbols (character number 9733). Enclose the star symbols in a span element, setting the font color to teal.
- 7. Directly below the h2 heading, insert another div element containing the inline image torte.jpg, located in the tutorial.01\case3 folder included with your Data Files. Specify the alternative text **Torte image**.
- 8. Mark the description of the dessert as a paragraph.
- 9. Mark "INGREDIENTS," "DIRECTIONS," and "REVIEWS" as h3 headings.
- 10. Enclose the list of ingredients in a block quote. Add line breaks after each item in the list.

EXPLORE

- 11. Mark the list of directions as an ordered list, with each direction a separate item in the list. Replace the word "degrees" with the degree symbol (character name deg).
- 12. Enclose the list of reviews in a block quote. Turn the list into a definition list. Mark up the definition list as follows:

EXPLORE

- a. The definition term is the number of stars assigned by each reviewer. Change the number of stars in the text file to star symbols (character number 9733). Amy wants you to display 5 stars for each review with the number of stars displayed in a teal font matching the stars given by the reviewer and the remaining stars displayed in a gray font. Use the span element to enclose the two different groups of stars.
- b. There are two definition descriptions for each review. The first encloses the text of the review. The second encloses the date of the review and the name of the reviewer.
- c. Insert an em-dash (character name "mdash") before the word "Reviewed" in each of the reviews.
- 13. Save your changes to the file, and then verify the layout and content of the page in your Web browser.
- 14. Submit the completed files to your instructor.

Create

Case Problem 4

Test your knowledge of HTML and use your creativity to design a Web page for an exercise equipment company.

Data Files needed for this Case Problem: logo.jpg, smith.jpg, and smith.txt

Body Systems Body Systems is a leading manufacturer of home gyms. The company recently hired you to assist in developing its Web site. Your first task is to create a Web page for the LSM400, a popular weight machine sold by the company. You've been given a text file describing the features of the LSM400. You've also received two image files: one of the company's logo and one of the LSM400. You are free to supplement these files with any other resources available to you. You are responsible for the page's content and appearance.

Complete the following:

- 1. Create a new HTML file named smith.htm and save it in the tutorial.01\case4 folder included with your Data Files.
- 2. Add a comment to the head section of the document describing the document's content and containing your name and the date.
- 3. Add an appropriate page title to the document.

- 4. Use the contents of the smith.txt document (located in the tutorial.01\case4 folder) as the basis of the text in the Web page. Include at least one example of each of the following:
 - a heading
 - a paragraph
 - an ordered or unordered list
 - an inline element
 - an inline image
 - a horizontal rule
 - a special character
 - an element attribute
- 5. Structure your HTML code so that it will be easy for others to read and understand.
- 6. Save your changes to the file, and then open it in your Web browser to verify that it is readable and attractive.
- 7. Submit your completed files to your instructor.

| Quick Check Answers Review

Session 1.1

- 1. A hypertext document is an electronic file containing elements that users can select, usually by clicking a mouse, to open other documents.
 - 2. A Web server is a computer on a network that stores a Web site and makes it available to clients. Users access the Web site by running a program called a Web browser on their computers.
 - 3. HTML documents do not exactly specify the appearance of a document; rather they describe the purpose of various elements in the document and leave it to the Web browser to determine the final appearance. A word processor like Microsoft Word exactly specifies the appearance of each document element.
 - 4. Deprecated features are those features that are being phased out by the W3C and might not be supported by future browsers.
 - 5. The html element.
 - 6. In the head section of the document you would enter the code <title>Technical Support</title>
 - 7. <!-- Page Updated on 4/15/2011 -->
 - 8. The title element was not properly nested within the head element.

Session 1.2

- 1. Block-level elements contain content that is displayed in a separate section within the page, such as a paragraph or a heading. An inline element is part of the same block as its surrounding content—for example, individual words or phrases within a paragraph.
- 2. Web browsers will strip out extra occurrences of white space and thus will ignore the extra blank line.
- 3. <h1>content</h1>
- 4. Use the blockquote element. Most browsers indent blockquote text.