HTML5 Minutes to Mastery Lab Guide

In this section, we'll embark on an exciting journey as we dive into the foundations of HTML. Whether you're a complete beginner or someone looking to refresh their skills, this section is designed to guide you through the process of creating your very first HTML document. We'll start by demystifying the essential elements of HTML and showing you how to structure your document using tags and elements. With our friendly step-by-step approach, you'll quickly grasp the core concepts and gain hands-on experience in writing clean and well-structured HTML code. Get ready to unleash your creativity and bring your ideas to life on the web. By the end of this section, you'll have the confidence to create your own HTML documents and set the stage for an incredible HTML5 journey ahead. Let's dive in and get started!

Coding Exercise

Follow these steps to create your first HTML page.

Step 1
Open Your Text Editor
Open your favorite text editor (such as Sublime Text, Visual Studio Code, or Atom) and create a new file. Save it with a .html extension (e.g., mydocument.html) to indicate that it's an HTML document.

Step 2
Create the Basic Document Structure
Start by writing the basic structure of an HTML document. Type <!DOCTYPE html> to specify that this is an HTML5 document. Then, create the HTML tags by typing <html> at the beginning and </html> at the end to enclose all the content.

```
1 <!DOCTYPE html>
2 <html>
3
4 </html>
```

Step 3
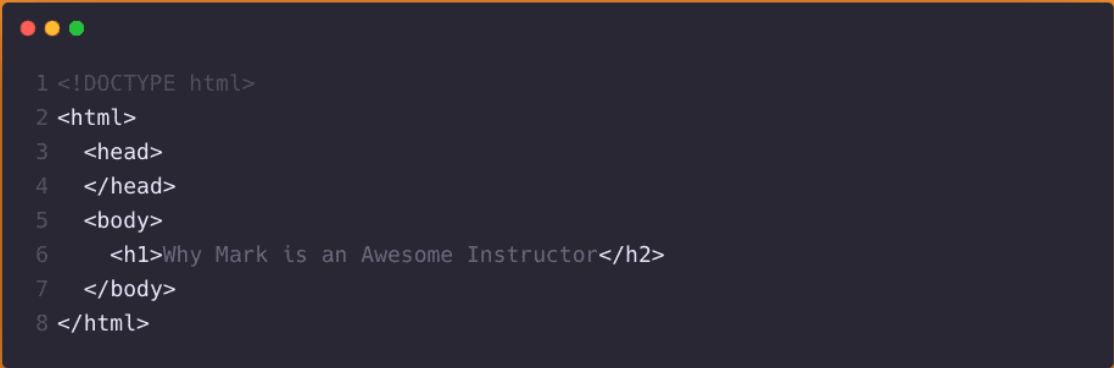
Create the Document Head and Body

Within the HTML tags, create the head and body sections. Type <head> at the beginning and </head> at the end to define the head section. This section contains metadata and other important information about the document. Following the <head> section, create the opening and closing <body> tags. For now, we'll focus on the body section where the visible content of the web page goes.

Step 4

Insert a heading

Inside the body tags, let's create a heading for our document. Type <h1> at the beginning and </h1> at the end. Between these tags, write a catchy title for your document, such as "Why Journey is the Best Band Ever"

```
1 <!DOCTYPE html>
2 <html>
3    <head>
4    </head>
5    <body>
6       <h1>Why Mark is an Awesome Instructor</h2>
7    </body>
8 </html>
```

Step 5

Adding Content

Now, let's add some content to our page. Create a paragraph by typing <p> at the beginning and </p> at the end. Between these tags, write a brief introduction about yourself or anything you find interesting.

Step 6
Display the results
Save the file and open it in your web browser. To do this, simply double-click on the file, and it should open in your default browser. Alternatively, you can right-click on the file, choose "Open with," and select your preferred browser.

Why Mark is an Awesome Instructor

Let me take a moment to tell you why Mark is an absolutely awesome instructor! First and foremost, his passion for teaching is contagious. He has a remarkable ability to break down complex concepts into digestible bits, making the learning process enjoyable and easy to understand.

FRAMEWORK TECH   SECTION 02

HTML5
ADDING TEXT MARKUP TO YOUR DOCUMENT

MARK LASSOFF

In this section, we'll delve into the wonderful world of text markup, where you'll learn how to make your web page content visually appealing and structured. We'll start by exploring various HTML tags that allow you to add emphasis, headings, paragraphs, lists, and more to your text. You'll discover the power of structuring your content using these markup tags, making it easier for both users and search engines to understand. But that's not all—once we've mastered the art of text markup, we'll introduce you to the basics of CSS (Cascading Style Sheets). CSS is a powerful language that allows you to add stunning visual styles and layout to your web pages. Get ready to unleash your creativity and transform your text into beautifully styled elements. By the end of this section, you'll have the skills to create well-structured and visually captivating web pages. Let's dive in and make your words shine on the web!

Code Exercise

In this exercise, we'll practice using text markup tags and basic CSS to style our web page content. Follow the instructions below to complete the exercise:

1. Open your text editor and create a new HTML file.
2. Create a basic document structure like you did in the previous exercise.
3. Inside the <body> tags, create a heading using the <h1> tag. Write "My Awesome Web Page" as the heading content.
4. Create a paragraph using the <p> tag below the heading. Write a short introduction about yourself or any topic of your choice.
5. Add another paragraph below the first one. Inside this paragraph, use the <strong> or <em> tag to emphasize a specific word or phrase of your choice.
6. Insert a line break between the two paragraphs using the <br> tag.
7. Now, let's apply some CSS to style our content. Inside the <head> section of your HTML file, add a <style> tag.
8. Within the <style> tag, create a CSS rule that targets the <h1> element and sets the color to your preferred choice.
9. Create another CSS rule that targets the <p> elements and changes the font-family to a specific font you like.

10. Finally, create a CSS rule that targets the emphasized text within the second paragraph and increases its font-size. Save your HTML file and open it in a web browser to see your styled web page.

Sample Solution

```html
1 <!DOCTYPE html>
2 <html>
3 <head>
4     <title>Exercise: Text Markup and CSS</title>
5     <style>
6         h1 {
7             color: blue;
8         }
9
10         p {
11             font-family: Arial, sans-serif;
12         }
13
14         p strong {
15             font-size: 1.2em;
16         }
17     </style>
18 </head>
19 <body>
20     <h1>My Awesome Web Page</h1>
21     <p>
22         Welcome to my web page! I'm excited to share my journey in web
    development with you.
23     </p>
24     <p>
25         I've <strong>bolded</strong> this text to emphasize its importance.
    Feel free to explore the rest of the content below.
26     </p>
27 </body>
28 </html>
```

HTML5

CREATING ORDERED AND UNORDERED LISTS IN HTML

MARK LASSOFF

In this section, we'll explore the power of organizing content using lists in HTML. Lists play a crucial role in structuring information on web pages, making them easier to read and understand. We'll dive into two main types of lists: ordered lists (ol) and unordered lists (ul). With ordered lists, you can create numbered lists, perfect for step-by-step instructions or any content that needs sequential ordering. On the other hand, unordered lists allow you to create bullet-pointed lists, ideal for presenting items without a specific order. We'll also cover nested lists, where you can create lists within lists, adding even more depth and organization to your content. By the end of this section, you'll have the skills to create well-structured and visually appealing lists, ensuring your web pages are both informative and engaging. Let's get started and dive into the world of HTML lists!

Code Exercise

In this exercise, we'll practice creating ordered and unordered lists using HTML. Follow the steps below to complete the exercise:

1. Open your text editor and create a new HTML file.
2. Inside the <body> tags, create a heading using the <h1> tag. Write a title for your web page, such as "My Favorite Things".
3. Create an unordered list using the <ul> tag. Inside the list, add at least three list items using the <li> tag. Each list item should represent one of your favorite hobbies, such as "Playing the guitar," "Hiking in nature," or "Exploring new cuisines."
4. Add a paragraph using the <p> tag below the unordered list. Write a short description explaining why you enjoy each of the listed hobbies.
5. Create an ordered list using the <ol> tag. Inside the list, add at least three list items using the <li> tag. Each list item should represent steps for achieving a specific goal or task, such as "Bake a delicious cake," "Learn a new programming language," or "Write a short story."
6. Save your HTML file and open it in a web browser to see your lists.
7. Now, let's apply some CSS to style our content. Add a <style> tag inside the <head> section of your HTML file.
8. Inside the <style> tag, create CSS rules that target the <h1> element and change its color, font-family, and font-size according to your preferences.

9. Create CSS rules that target the <li> elements of both the unordered and ordered lists. Customize their color, font-family, and font-size as desired.

Sample Solution

```html
1 <!DOCTYPE html>
2 <html>
3 <head>
4     <title>Exercise: HTML Lists and CSS</title>
5     <style>
6         h1 {
7             color: #ff6600;
8             font-family: Arial, sans-serif;
9             font-size: 24px;
10        }
11
12        li {
13            color: #333333;
14            font-family: 'Verdana', sans-serif;
15            font-size: 16px;
16        }
17    </style>
18 </head>
19 <body>
20     <h1>My Favorite Things</h1>
21     <ul>
22         <li>Playing the guitar</li>
23         <li>Hiking in nature</li>
24         <li>Exploring new cuisines</li>
25     </ul>
26     <p>I enjoy playing the guitar because it allows me to express my
   creativity and relax. Hiking in nature helps me reconnect with the outdoors
   and rejuvenate my mind. Exploring new cuisines lets me experience diverse
   flavors and cultures.</p>
27     <ol>
28         <li>Bake a delicious cake</li>
29         <li>Learn a new programming language</li>
30         <li>Write a short story</li>
31     </ol>
32 </body>
33 </html>
```

FRAMEWORK TECH   SECTION 04
HTML5
HTML MEDIA: IMAGES, AUDIO AND VIDEO
MARK LASSOFF

In this section, we'll explore the exciting world of multimedia in HTML. Today's web experience is enriched with audio, video, and images that engage and captivate users. In this section, we'll learn how to seamlessly integrate these media elements into our web pages. You'll discover the various HTML tags and attributes used to embed audio and video files, and we'll explore the different image formats and techniques to optimize their display. We'll also dive into the realm of accessibility, ensuring that our multimedia content is inclusive and available to all users. So, whether you're looking to enhance your storytelling with captivating visuals, create an immersive audio experience, or deliver engaging video content, this section will equip you with the tools and knowledge to do so. Get ready to make your web pages come alive with audio, video, and stunning imagery. Let's dive in and unlock the power of multimedia in HTML!

Code Exercise

In this exercise, we'll practice inserting audio elements into a web page using HTML. Follow the steps below to complete the exercise:

1. Open your text editor and create a new HTML file.
2. Inside the <body> tags, create a heading using the <h1> tag. Write a title for your web page, such as "My Favorite Songs".
3. Search for free MP3 files of your favorite songs on websites that offer royalty-free music or creative commons licenses. Some popular sources for free MP3s include websites like SoundCloud, Bandcamp, and Free Music Archive. Choose at least three songs for this exercise.
4. For each song, insert an audio element using the <audio> tag. Set the src attribute to the URL of the MP3 file you found. Optionally, you can add a controls attribute to enable the audio controls for the user.
5. Save your HTML file and open it in a web browser to listen to your favorite songs.

Sample Solution

```html
1 <!DOCTYPE html>
2 <html>
3 <head>
4     <title>Exercise: Inserting Audio Elements</title>
5 </head>
6 <body>
7     <h1>My Favorite Songs</h1>
8     <audio src="URL_OF_SONG_1.mp3" controls></audio>
9     <audio src="URL_OF_SONG_2.mp3" controls></audio>
10    <audio src="URL_OF_SONG_3.mp3" controls></audio>
11 </body>
12 </html>
```

In this section, we'll dive into the art of linking and navigation in HTML. Hyperlinks are the backbone of the web, allowing users to navigate between web pages and access various online resources. In this section, we'll explore the <a> tag and its attributes to create different types of hyperlinks, including links to other web pages, specific sections within a page, email addresses, and downloadable files. You'll also learn how to customize link behavior and appearance using CSS. We'll delve into the best practices for creating accessible and user-friendly links, ensuring an intuitive browsing experience for all users. So, whether you're building a personal website, an e-commerce platform, or a blog, mastering the art of creating HTML hyperlinks is crucial. Get ready to connect your web pages and provide seamless navigation for your users. Let's dive in and unlock the power of hyperlinks in HTML!

Code Exercise

In this exercise, we'll practice creating external links using HTML. Follow the steps below to complete the exercise:

1. Open your text editor and create a new HTML file.
2. Inside the <body> tags, create a heading using the <h1> tag. Write a title for your web page, such as "My Links Exercise".
3. Create an external link by using the <a> tag with the href attribute set to a website of your choice. Add descriptive text between the opening and closing <a> tags.
4. Create another external link, this time using an image as the link. Use the <a> tag with the href attribute set to a different website. Inside the <a> tags, insert an <img> tag with the src attribute set to the URL of an image you want to use as the link.
5. Save your HTML file and open it in a web browser to test your links.

Sample Solution

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Exercise: External Hyperlinks</title>
5  </head>
6  <body>
7      <h1>My Links Exercise</h1>
8
9      <p>Visit <a href="https://www.example.com">Example Website</a> for more
   information.</p>
10
11     <p>Explore the <a href="https://www.example.com"><img src="image-url.jpg"
   alt="Image Link"></a> for visual inspiration.</p>
12  </body>
13  </html>
14
```

HTML5

CREATING ORDERED AND UNORDERED LISTS IN HTML

MARK LASSOFF

In this section, we'll delve into the powerful world of tables in HTML. Tables are an essential tool for organizing and presenting data in a structured manner. Whether you need to display product information, financial data, or any other type of tabular data, HTML tables will be your go-to solution. In this section, we'll explore the <table>, <tr>, <th>, and <td> tags, which form the building blocks of creating tables. We'll learn how to define table headers, table rows, and table cells, and we'll discover various attributes that allow us to customize the appearance and structure of our tables.

Code Exercise

In this exercise, we'll practice creating an HTML table to showcase the names of famous New York Yankees players, the years they played, and their positions. Follow the steps below to complete the exercise:

1. Open your text editor and create a new HTML file.
2. Inside the <body> tags, create a heading using the <h1> tag. Write a title for your table, such as "Famous New York Yankees Players".
3. Create a table using the <table> tag.
4. Inside the table, create a table header row using the <tr> tag and table header cells using the <th> tag. Write "Player Name", "Years Played", and "Position" as the column headers.
5. Add table rows using the <tr> tag for each player. Within each row, create table data cells using the <td> tag and fill in the corresponding player's name, years played, and position.
6. Save your HTML file and open it in a web browser to see your table.

Players
Babe Ruth	1920-1934	Outfielder
Lou Gehrig	1923-1939	First Base
Mickey Mantle	1951-1968	Outfielder
Derek Jeter	1995-2014	Short Stop
Dave Winfield	1981-1990	Outfielder

Sample Solution

```html
1 <!DOCTYPE html>
2 <html>
3 <head>
4     <title>Exercise: Creating an HTML Table</title>
5 </head>
6 <body>
7     <h1>Famous New York Yankees Players</h1>
8     <table>
9         <tr>
10            <th>Player Name</th>
11            <th>Years Played</th>
12            <th>Position</th>
13        </tr>
14        <tr>
15            <td>Babe Ruth</td>
16            <td>1920-1934</td>
17            <td>Outfielder, Pitcher</td>
18        </tr>
19        <tr>
20            <td>Lou Gehrig</td>
21            <td>1923-1939</td>
22            <td>First Baseman</td>
23        </tr>
24        <tr>
25            <td>Mickey Mantle</td>
26            <td>1951-1968</td>
27            <td>Outfielder</td>
28        </tr>
29        <tr>
30            <td>Derek Jeter</td>
31            <td>1995-2014</td>
32            <td>Shortstop</td>
33        </tr>
34        <tr>
35            <td>Dave Winfield</td>
36            <td>1981-1990</td>
37            <td>Outfielder</td>
38        </tr>
39    </table>
40 </body>
41 </html>
```

Thank You!

Thanks so much for completing this adventure with me! I hope you found that the instruction was effective and that you now have a better understanding of HTML!

If I can be helpful to you, you can reach me at mark@frameworktv.com. Additionally, you can find out more about other courses and programs I offer at frameworktv.com.

Till we meet again!
Mark Lassoff
Course Author and Instructor