

IST144 Mid-Term Exam

10/24/2023

Name: Vrajesh ShahI have highlighted Multiple Choice Question Answers.

1.) What is the correct HTML for adding a background color?

`<body bg="yellow">``<body style="background-color:yellow;">``<background>yellow</background>`

2.) What is the correct HTML for creating a hyperlink? answer

`<a>http://www.w3schools.com``W3Schools``W3Schools.com``W3Schools.com`

3.) Which of these elements are all <table> elements?

`<thead> <body> <tr>``<table> <head> <tfoot>``<table> <tr> <td>`

```
<table> <tr> <td>
```

4.) How can you make a numbered list?

```
<dl>
```

```
<list>
```

```
<ol>
```

```
<ul>
```

5.) What is the correct HTML for making a drop-down list?

```
<input type="dropdown">
```

```
<input type="list">
```

```
<select>
```

```
<list>
```

6.) Check the following HTMLs and answer the questions.

```
  
  
<p> This is the text  
mixed with image.</p>
```

a.) What is the attribute "alt" used for?

Ans: In HTML, an image's "alt" element is used to give alternate text. In addition to serving as a description of the image for users with disabilities who rely on screen readers, this text is displayed if the image cannot be loaded or is not visible to the user. Both accessibility and SEO (search engine optimization) depend on it.

b.) What is the difference between first img HTML and second img HTML?

Ans: With the same source ("img_girl.jpg"), alt text ("Girl in a jacket"), and set dimensions, the first and second image elements (img tags) both display the same

image. The dimensions are described differently, which is the main difference:

The "width" and "height" properties are used to specify the dimensions of the first `img` HTML element, as in `width="500"` and `height="600"`. The image's width and height are determined by these characteristics.

Using inline CSS styling, the second `img` HTML's dimensions are set to `style="width:500px;height:600px;"`. This is a declaration of inline style to set the width and height.

Both examples will display the image at the same size and work similarly. The second example employs CSS to style the content, giving it more flexibility for future styling.

c.) How can you move the `img` to the right of the text in third `p` HTML?

Ans: To move the image to the right of the text in the third paragraph (`p` HTML), you can use CSS to style it. You can use the "float" property to move the image to the right, and you might also want to add some margin to create spacing between the image and the text. Here's an example of how you can achieve this:

```
<p>
  
  This is the text mixed with the image.
</p>
```

In this code, we've added "float: right;" to move the image to the right of the text and "margin-left: 10px;" to create a 10-pixel gap between the image and the text.

d.) Write an image link HTML (when you click the image, you jump to target URL)

Ans: To create an image that serves as a link, you can use the "a" (anchor) tag to wrap the "img" tag. Here's an example:

```
<a href="https://www.example.com">
  
</a>
```

In this example, when a user clicks on the image, they will be taken to the URL specified in the "href" attribute of the anchor tag (in this case, "https://www.example.com").

7.) Try to find error in the following Image Maps code.

Also beside the shape “rect” and “circle”, what else you can have for shape?

```


<map name="sample">
  <area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">
  <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">
  <area shape="circle" coords="337,300,44" alt="Cup of coffee" href="coffee.htm">
</map>
```

Ans: The image tag's usemap attribute refers to a map with the name #workmap, while the actual name of the map is sample.

The <map> tag's name attribute should match the name you specified in the usemap attribute. In this case, it should be workmap, not sample.

```


<map name="workmap">
  <area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">
  <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">
  <area shape="circle" coords="337,300,44" alt="Cup of coffee" href="coffee.htm">
</map>
```

For the second question about shapes the answer is:

Default: This is used to define the default clickable area when no other area matches the click. It covers the entire image.

Poly: This is used to define a polygonal area, allowing for more complex shapes. You define the coordinates for the vertices of the polygon.

8.) Check the following code and answer the questions:

```
<style>
body {
    background-image: url('img_girl.jpg');
    background-repeat: no-repeat;
    background-attachment: fixed;
    background-size: cover;
}
</style>
```

a.) How to repeat the background the image? (write the style code below)

Ans: To repeat the background image, you can use the background-repeat property and set it to either repeat, repeat-x, or repeat-y, depending on the desired direction of repetition. For example:

repeat: The image will repeat both horizontally and vertically.

repeat-x: The image will repeat only horizontally.

repeat-y: The image will repeat only vertically.

Here's an example of setting the background image to repeat both horizontally and vertically:

```
body {
    background-image: url('img_girl.jpg');
    background-repeat: repeat;
}
```

b.) What does “fixed” mean for background-attachment?

Ans: Setting background-attachment: fixed; means that the background image remains fixed in the viewport as the user scrolls the page. In other words, the background image stays in a fixed position relative to the viewport, and it doesn't move with the content as the user scrolls. This can create a parallax effect or give the impression that the content is scrolling over the background image.

c.) If we set background-size to “100% 100%”, what is the difference between “cover” and “100% 100%” ?

Ans: Setting background-size to "100% 100%" instructs the code to resize the background picture to fit entirely within the boundaries of the element to which it is

applied. In order to fill the element's width and height without cropping, the image will enlarge or reduce as appropriate. Depending on the aspect ratio of the image, there can be empty space in the element's width or height if their aspect ratios are different.

The code scales the background picture to fit the dimensions of the element while retaining its aspect ratio when you set background-size: cover; on the other hand. Cropping may be necessary if the aspect ratios of the element and the image do not line up. To guarantee that it completely fills the element and there is no visible empty space, portions of the image may be cropped.

In conclusion, the main distinction is how each approach treats the aspect ratio and any ensuing blank space or cropping:

"100% 100%" makes sure that the entire image, without cropping, fits within the element, even if it results in empty space.

"cover" makes sure that the image fills the space and covers the full element, cropping it if necessary to keep the aspect ratio.

9.) Go to Picture Element example:

https://www.w3schools.com/html/html_images_picture.asp

```
<picture>
  <source media="(min-width: 650px)" srcset="img_food.jpg">
  <source media="(min-width: 465px)" srcset="img_car.jpg">
  
</picture>
```

You will see food, car and girl when the screen width reduces from big to small.

Try to use "max-width" to show girl, car and food when the screen width reduce from big to small. Test the code in "Try it Yourself" and copy them below.

Code:

```
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>

<h2>The picture Element</h2>
```

```
<picture>
  <source media="(max-width: 465px)" srcset="img_girl.jpg">
  <source media="(max-width: 649px)" srcset="img_car.jpg">
  
</picture>

</body>
</html>
```

When the screen width will be 465 and 649 car image will be shown, when the screen width will be 650 or more girl image will appear and when the screen width will be less than 600 that the food image will appear

10.) Create a Bookmark and add a link to bookmark.

In the following code, create two bookmarks in Chapter 3 and Chapter 8.
Then add two links which will jump to those two bookmarks.

```
<!DOCTYPE html>
<html>
<body>

  <h2>Chapter 1</h2>
  <p>This chapter explains ba bla bla</p>

  <h2>Chapter 2</h2>
  <p>This chapter explains ba bla bla</p>

  <h2>Chapter 3</h2>
  <p>This chapter explains ba bla bla</p>
```

<h2>Chapter 4</h2>

<p>This chapter explains ba bla bla</p>

<h2>Chapter 5</h2>

<p>This chapter explains ba bla bla</p>

<h2>Chapter 6</h2>

<p>This chapter explains ba bla bla</p>

<h2>Chapter 7</h2>

<p>This chapter explains ba bla bla</p>

<h2>Chapter 8</h2>

<p>This chapter explains ba bla bla</p>

<h2>Chapter 9</h2>

<p>This chapter explains ba bla bla</p>

<h2>Chapter 10</h2>

<p>This chapter explains ba bla bla</p>

</body>

</html>

Code: <!DOCTYPE html>

<html>

<head>

<style>

```
.chapter-link {  
    text-decoration: underline;  
    color: blue;  
}
```

</style>

</head>

<body>

<h2>Chapter 1</h2>

<p>This chapter explains ba bla bla</p>

<h2>Chapter 2</h2>

<p>This chapter explains ba bla bla</p>

<h2 id="chapter3">Chapter 3</h2>

<p>This chapter explains ba bla bla</p>


```
<h2>Chapter 4</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 5</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 6</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 7</h2>
<p>This chapter explains ba bla bla</p>

<h2 id="chapter8">Chapter 8</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 9</h2>
<p>This chapter explains ba bla bla</p>

<h2>Chapter 10</h2>
<p>This chapter explains ba bla bla</p>

<h3>Bookmarks</h3>
<p><a class="chapter-link" href="#chapter3">Chapter 3</a></p>
<p><a class="chapter-link" href="#chapter8">Chapter 8</a></p>

</body>
</html>
```

I added the id attribute to the <h2> elements of Chapter 3 and Chapter 8 to create bookmarks within the main content.

At the end of the page, I have added a "Bookmarks" heading and links to Chapter 3 and Chapter 8, which will jump to those chapters.

- 11.) Create an iframe in your page, how can you show <https://www.mccc.edu> in the iframe when you click a link?

Code:

```
<!DOCTYPE html>
<html>
```

```
<head>
<style>

#mylframe {
    width: 100%;
    height: 300px; /* Adjust the height as needed */
    border: 1px solid #ccc;
}
</style>
</head>
<body>

<h2>Click the link to load MCCC website in the iframe:</h2>

<a href="javascript:void(0);" onclick="loadWebsiteInIframe('https://www.mccc.edu')">Load
MCCC Website</a>

<iframe id="mylframe" src=""></iframe>

<script>
function loadWebsiteInIframe(url) {
    var iframe = document.getElementById('mylframe');

    iframe.src = url;
}
</script>

</body>
</html>
```

- 12.) Let's say you have file folder called Projects, under Projects folder, there is another folder called HTML (Projects/HTML), the following html code is in file images.htm under folder HTML.

Please list the folders where the picture.jpg located.

```




```

Ans: ``

This is an absolute URL, so the image is not located within local file structure but can be visited by using this link in google.

``

This is a relative path, and it points to an image file located in the same directory as the HTML file, under a subdirectory named "images." So, the "picture.jpg" file is located in the "Projects/HTML/images/" directory.

``

This is also a relative path, and it points to an image file located in the parent directory of the directory containing the HTML file. So, the "picture.jpg" file is located in the "Projects/images/" directory.

``

This is a relative path that points to an image file located in a subdirectory named "images" within the same directory as the HTML file. So, the "picture.jpg" file is located in the "Projects/HTML/images/" directory.

13.) Responsive Images

``

``

What is the difference between style="width:100%" and style="max-width:100%" ?
How to responsive text size?

Ans: In the context of responsive images, the difference between style="width:100%;" and style="max-width:100%;" is as follows:

style="width:100%;"

The width of the image is set to 100% of its container by this style attribute. It implies that the height will always change proportionally and that the image will always fill the complete width of its container. If the container is broader than the image, this could stretch the image or make it larger than its original proportions.

```
style="max-width:100%;height:auto;"
```

The maximum width of the image is set to 100% of its container by this style attribute. The "height:auto;" section preserves the aspect ratio of the image, which causes the height to be automatically adjusted to preserve the proper proportions. This method makes sure that the image doesn't enlarge past its original boundaries and shrinks it to match the width of the container while maintaining its aspect ratio.

For the second question which uis how to make a test size responsive the answer is:

To make text size responsive, we can use CSS media queries to adjust the text size based on the screen size or device. Here's a brief explanation of the steps to make text size responsive:

Define a Default Text Size: Start by setting a default font size for your text. This size should be suitable for larger screens or the standard view of your website.

Use CSS Media Queries: Media queries allow us to apply different CSS rules based on the characteristics of the user's device or screen. You can specify the maximum or minimum screen width at which these rules should apply.

Adjust Text Size with Media Queries: Within our media queries, adjust the font size for specific screen sizes. For example, we might reduce the font size for smaller screens or increase it for larger screens. Use the font-size property to make these adjustments.

For example:

```
// Default text size
p {
    font-size: 16px;
}

// Media query for smaller screens (e.g., smartphones)
@media (max-width: 768px) {
    p {
```

```
        font-size: 14px;
    }
}

// Media query for larger screens (e.g., desktops)
@media (min-width: 1200px) {
    p {
        font-size: 18px;
    }
}
```