Assignment:Introduction to HTML/CSS

1. How are inline and block elements different from each other?

Solution: -

Inline Elements

Basically, an inline element does not cause a line break (start on a new line) and does not take up the full width of a page, only the space bounded by its opening and closing tag. It is usually used within other HTML elements.

Other examples of inline elements are:

- anchor <a> tag
- emphasis tag
- image tag

Block Elements

A block-level element always starts on a new line and takes up the full width of a page, from left to right. A block-level element can take up one line or multiple lines and has a line break before and after the element.

Other examples of the block-level tag are:

- Heading tags <h1> to <h6>
- List (Ordered, Unordered, Description and List Item) tags , ,<dl> ,
- Preformatted text tag
- Blockquote tag <blockquote>

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

<div style="border: lpx solid black">Hello World</div>
The DIV element is a block element, and will always start on a new line and take up the full width available (stretches out to the left and right as far as it can).
</body>
</body>
</html>
```

Hello World

The DIV element is a block element, and will always start on a new line and take up the full width available (stretches out to the left and right as far as it can).

2. Explain the difference between visibility:hidden and display:none

Solution: -

display: none;

display: none means that the tag in question will not appear on the page at all (although you can still interact with it through the dom). There will be no space allocated for it between the other tags.

visibility: hidden;

visibility:hidden means that unlike display:none, the tag is not visible, but space is allocated for it on the page. The tag is rendered, it just isn't seen on the page.

3. Explain the clear and float properties.

Solution: -

Float Properties

The float property is used for positioning and formatting content e.g. let an image float left to the text in a container.

The float property can have one of the following values:

- left The element floats to the left of its container
- right The element floats to the right of its container
- none The element does not float (will be displayed just where it occurs in the text). This is default
- inherit The element inherits the float value of its parent

In its simplest use, the float property can be used to wrap text around images.

Clear Properties

The clear property specifies what elements can float beside the cleared element and on which side.

The clear property can have one of the following values:

- none Allows floating elements on both sides. This is default
- left No floating elements allowed on the left side
- right- No floating elements allowed on the right side

- both No floating elements allowed on either the left or the right side
- inherit The element inherits the clear value of its parent

The most common way to use the clear property is after you have used a float property on an element.



4. Explain the difference between absolute, relative, fixed and static.

Solution: -

position: static;

HTML elements are positioned static by default. Static positioned elements are not affected by the top, bottom, left, and right properties. An element with position: static; is not positioned in any special way; it is always positioned according to the normal flow of the page

```
<!DOCTYPE html>
<html>
<head>
<style>
div.static {
    position: static;
    border: 3px solid #73AD21;
}
</style>
</head>
<body>
<div class="static">
    This div element has position: static;
</div</tr>
```

position: relative;

An element with position: relative; is positioned relative to its normal position. Setting the top, right, bottom, and left properties of a relatively-positioned element will cause it

to be adjusted away from its normal position. Other content will not be adjusted to fit into any gap left by the element.

```
<!DOCTYPE html>
<html>
<head>
<style>
div.relative {
   position: relative;
   border: 3px solid #73AD21;
   left:30px;
} 
</style>
</head>
<body>
<div class="relative">
   This div element has position: relative;
</div>
</body>
</head>
<body>
</html>
```

position: fixed;

An element with position: fixed; is positioned relative to the viewport, which means it always stays in the same place even if the page is scrolled. The top, right, bottom, and left properties are used to position the element. A fixed element does not leave a gap in the page where it would normally have been located.

```
<!DOCTYPE html>
<html>
<html>
<head>
<style>
div.fixed {
    position: fixed;
    bottom: 0;
    right: 0;
    width: 300px;
    border: 3px solid #73AD21;
}

</style>
</head>
<body>
<div class="fixed">
This div element has position: fixed;
</div>
</body>
</html>

This div element has position: fixed;
```

position: absolute;

An element with position: absolute; is positioned relative to the nearest positioned ancestor (instead of positioned relative to the viewport, like fixed). However; if an absolute positioned element has no positioned ancestors, it uses the document body, and moves along with page scrolling.

```
<style>
                                                                                 This div element has position: relative;
div.relative {
 position: relative;
 width: 400px;
 height: 200px;
                                                                                                         This div element has position:
 border: 3px solid #73AD21;
                                                                                                          absolute;
div.absolute {
 position: absolute;
  top: 80px;
 right: 0;
width: 200px;
 height: 100px;
border: 3px solid #73AD21;
</style>
</head>
<body>
<div class="relative">This div element has position: relative;
 <div class="absolute">This div element has position: absolute;
</div>
</div>
</body>
</html>
```

5. Write the HTML code to create a table in which there are 4 columns(ID , Employee Name, Designation, Department) and at least 6 rows. Also do some styling to it.

Solution: -

File Link -

https://github.com/SaketBishu/Bootcamp_TTN/tree/session5_Introduction_to_html_css/html_css

ID	Employee Name	Designation	Department	
1	Saket Kumar	B-Tech	ios	
2	Jay Patel	B-Tech	Devops	
3	Devansh Bindal	B-Tech	Mean Stack	
4	Bhupesh Chikara	BE	FEAN	
5	Siddhant	B-Tech	Big Data	
6	Mohit	B-Tech	Android	

6. Why do we use meta tags?

Solution : - Meta tags

The <meta> tag provides metadata about the HTML document. Metadata will not be displayed on the page, but will be machine parsable. Meta elements are typically used to specify page description, keywords, author of the document, last modified, and other metadata. Also, it helps to improve the SEO (Search Engine Optimization) of a web page by using certain keywords related to the web page. <meta> tags always go inside the <head> element.

Following are few examples of <meta> tag with different attributes :

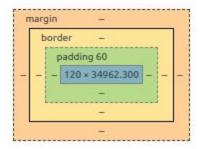
- <meta name="keywords" content="HTML, CSS, XML, XHTML, JavaScript"> (For Search engines)
- 2) <meta name="description" content="Free Web tutorials on HTML and CSS"> (Description of web page)
- 3) <meta name="author" content="John Doe"> (Author of web page)
- 4) <meta name="viewport" content="width=device-width, initial-scale=1.0"> (Responsiveness)

```
<head>
     <meta charset="UTF-8">
          <meta name="description" content="Free Web tutorials">
          <meta name="keywords" content="HTML, CSS, XML, JavaScript">
          <meta name="keywords" content="HTML, CSS, XML, JavaScript">
           <meta name="author" content="John Doe">
                <meta name="viewport" content="width=device-width, initial-scale=1.0">
                 </head>
```

7. Explain box model.

Solution: - Box Model

All HTML elements can be considered as boxes. In CSS, the term "box model" is used when talking about design and layout. The CSS box model is essentially a box that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content. The image below illustrates the box model:



Explanation of the different parts:

- Content The content of the box, where text and images appear
- Padding Clears an area around the content. The padding is transparent
- Border A border that goes around the padding and content
- Margin Clears an area outside the border. The margin is transparent

The box model allows us to add a border around elements, and to define space between elements.

8. What are the different types of CSS Selectors?

Solution: -

CSS Selectors

CSS selectors are used to "find" (or select) the HTML elements you want to style.

• Element Selector

The element selector selects HTML elements based on the element name.

```
p {
  text-align: center;
  color: red;
}
```

Id Selector

The id selector uses the id attribute of an HTML element to select a specific element. The id of an element is unique within a page, so the id selector is used to select one unique element!. To select an element with a specific id, write a hash (#) character, followed by the id of the element.

```
#para1 {
  text-align: center;
  color: red;
}
```

Class Selector

The class selector selects HTML elements with a specific class attribute. To select elements with a specific class, write a period (.) character, followed by the class name.

```
.center {
  text-align: center;
  color: red;
}
```

• Universal Selector

The universal selector (*) selects all HTML elements on the page.

```
* {
  text-align: center;
  color: blue;
}
```

• **Grouping Selector**

The grouping selector selects all the HTML elements with the same style definitions. Look at the following CSS code (the h1, h2, and p elements have the same style definitions)

```
h1, h2, p {
  text-align: center;
  color: red;
}
```

9. Define Doctype.

Solution: - A doctype or document type declaration is an instruction which tells the web browser about the markup language in which the current page is written. The Doctype is not an element or tag, it lets the browser know about the version of or standard of HTML or any other markup language that is being used in the document.

The DOCTYPE for HTML5 is case-insensitive and can be written as shown below:

```
<!DOCTYPE html>
```

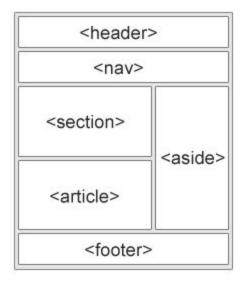
10. Explain 5 HTML5 semantic tags.

Solution: - HTML5 is the latest version of HTML and it introduces many new semantic <tags>

Some of the commonly used new semantic tags of HTML5 are:

- <article> Defines an article in the document
- <aside> Defines content aside from the page content like sidebar.
- <footer> Defines a footer for the document or a section

- <header> Defines a header for the document or a section
- <nav> Defines navigation links in the document
- <section> Defines a section in the document



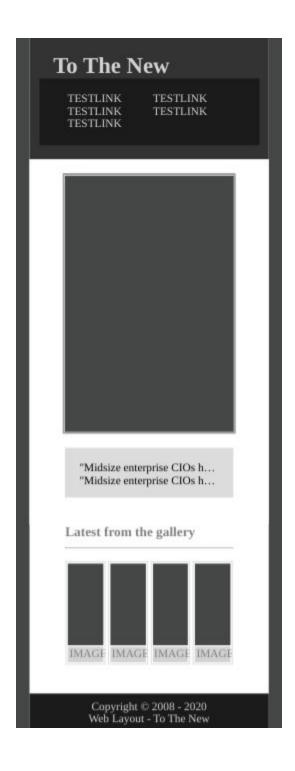
11.Create HTML for web-page.jpg

Solution: -

File Link -

https://github.com/SaketBishu/Bootcamp_TTN/tree/session5_Introduction_to_html_css/html_css

To The New TESTLINK TESTLINK TESTLINK TESTLINK TESTLINK "Midsize enterprise CIOs have a unique set of factors influencing their cloud strategy and motivating adoption of clou... "Midsize enterprise CIOs have a unique set of factors influencing their cloud strategy and motivating adoption of clou... Latest from the gallery Latest from the gallery IMAGE NAME CAPTION Web Layout - To The New



12.Create HTML for form.png

Solution : -

File Link -

https://github.com/SaketBishu/Bootcamp_TTN/tree/session5_Introduction_to_html_css/html_css

To The New Home Quick Help Title* Title... Description* Write something.. Security: Product* Verification* Verification... License* Business Security: Attachments*

To The New Home Quick Help

