Introduction to HTML/CSS

Exercise

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

Ans. A **block-level element** always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

Hello World! This is the "div" tag.

Written by Arpit Aulak.

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To The New

Greater noida

India

This is the "address tag"

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).

In this example I have used <div> and <address> tags which are both block-level elements.

Block level elements in HTML:

<div>,<aside>,<article>,<address>.

An **inline element** does not start on a new line and only takes up as much width as necessary.

This is an inline span Hello World element inside a paragraph.

The SPAN element is an inline element, and will not start on a new line and only takes up as much width as necessary.

In this example i have used tag which is an inline element.

Inline elements in HTML:

<a>,
,<i>,.

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

Ans.

1. display: none;

It is commonly used with JavaScript to hide and show elements without deleting and recreating them.

-This is before using display: none;

Display a list of links as a horizontal menu:

- HTML
- CSS
- JavaScript

List ends here

-This is after using display: none;

Display a list of links as a horizontal menu:

List ends here

Hiding an element can be done by setting the display property to none. The element will be hidden, and the page will be displayed as if the element is not there.

- 2. Visibility:hidden;
- -This is before using Visibility:hidden;

This is a visible heading This is a hidden heading

Notice that the hidden heading still takes up space.

-This is after using Visibility:hidden;

This is a visible heading

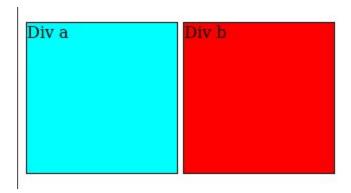
Notice that the hidden heading still takes up space.

It also hides an element. However, the element will still take up the same space as before. The element will be hidden, but still affect the layout.

3. Explain the clear and float properties.

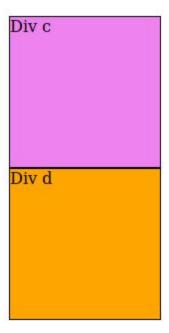
Ans. The CSS **float property** specifies how an element should float and is used for positioning and formatting content e.g. let an image float left to the text in a container.

-This is using float:left; inside a container.



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

-This is using clear:bottom; in a container.



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

Ans.

1. 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:

position: static;

This div element has position: static;

2. Position: relative

An element with position: relative; is positioned relative to its normal position.

position: relative;

This div element has position: relative;

3. 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.

position: fixed;

4. 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.

position: absolute;

This div element has position: relative;

This div element has position: absolute;

This div element has position: fixed;

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.

Ans. Code for this Table is in the html.zip file.

Employee Details

ID	Employee Name	Designation	Department
1	Arpit Aulak	trainee	AMC
2	Janhvi Singh	trainee	QE
3	Ishrat	trainee	AMC
4	Abheek Rawal	trainee	DevOps
5	Arjun Chandra	trainee	AMC
6	Aayush Sahanan	trainee	Android

6. Why do we use meta tags?

Ans. The <meta> tag provides metadata about the HTML document. Meta elements are typically used to specify page description, keywords, author of the document, last modified, and other metadata. The metadata can be used by browsers (how to display content or reload page), search engines (keywords), or other web services.

These are some example of Meta Tags:-

```
<meta charset="UTF-8">
<meta name="description" content="Metadata description">
<meta name="keywords" content="HTML,CSS">
<meta name="author" content="Arpit Aulak">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

7. Explain 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.

-This is an Example of Box Model in css.

Demonstrating the Box Model

The CSS box model is essentially a box that wraps around every HTML element. It consists of: borders, padding, margins, and the actual content.

This text is the content of the box. We have added a 50px padding, 20px margin and a 15px green border. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

8. What are the different types of CSS Selectors?

The CSS id Selector

The id selector uses the id attribute of an HTML element to select a specific element and the id of an element is unique within a page, so the id selector is used to select one unique element!

this is paragraph

This paragraph is not affected by the style.

The CSS Universal Selector

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

This is Heading

Everything on the page is designed by the css.

Me too!

And me!

The CSS Grouping Selector

The grouping selector selects all the HTML elements with the same style definitions.

Hello World!

Smaller heading!

This is a paragraph.

9. Define Doctype.

The <!DOCTYPE> declaration must be the very first thing in your HTML document, before the <html> tag.

The <!DOCTYPE> declaration is not an HTML tag; it is an instruction to the web browser about what version of HTML the page is written in.

In HTML 4.01, the <!DOCTYPE> declaration refers to a DTD, because HTML 4.01 was based on SGML. The DTD specifies the rules for the markup language, so that the browsers render the content correctly.

My Html Page

This HTML !DOCTYPE tag and tells the browser what version of HTML the document is written so that the browser knows what to expect.

10. Explain 5 HTML5 semantic tags.

1. <article>

The **<article>** tag is one of the new sectioning element in HTML5. The HTML **<article>** tag is used to represent an article. More specifically, the content within the **<article>** tag is independent from the other content of the site (even though it can be related). In other words, The article element represents a component of a page that consists of self-contained composition in a document, page or a site. For Ex. in syndication.

Examples of where an <article> element can be used:

- Forum post
- Blog post
- Newspaper article

-This is an example of <article> tag:-

What Does WWF Do?

WWF's mission is to stop the degradation of our planet's natural environment, and build a future in which humans live in harmony with nature.

2. <section>

Section tag defines the section of documents such as chapters, headers, footers or any other sections. The section tag divides the content into section and subsections. The section tag is used when requirements of two headers or footers or any other section of documents needed. Section tag grouped the generic block of related contents. The main advantage of the section tag is, it is a semantic element, which describes its meaning to both browser and developer.

-This is an example in which two sections are made using the <section> tag.

This is Section 1	
content	

This is Section 2

content

3. <header>

The <header> tag in HTML is used to define the header for a document or a section.

- The header tag contains information related to the title and heading of the related content.
- The <header> element is intended to usually contain the section's heading (an h1-h6 element or an <hgroup> element), but this is not required.
- The <header> element can also be used to wrap a section's table of contents,
 a search form, or any relevant logos.
- The <header> tag is a new tag in HTML5 and it requires a starting tag as well as an end tag.
- There can be several <header> elements in one document.
- A <header> tag cannot be placed within a <footer>, <address> or another
 <header> element.

-In this the bordered portion of the page is the header.

What Does WWF Do?

WWF's mission:

WWF's mission is to stop the degradation of our planet's natural environment, and build a future in which humans live in harmony with nature.

4. <footer>

The <footer> tag in HTML is used to define a footer of HTML document. This section contains the footer information (author information, copyright information, carriers, etc). The footer tag is used within the body tag. The <footer> tag is new in the HTML5. The footer elements require a start tag as well as an end tag.

A footer element typically contains authorship information, copyright information, contact information, sitemap, back to top links, related documents, etc.

-In this the bordered portion of the page is the footer.

This is the content of the page.

Footer Content

Contact information: someone@example.com.

5. <nav>

The <nav> tag is used to declaring the navigational section in HTML documents. Websites typically have sections dedicated to navigational links, which enables user to navigate the site. These links can be placed inside a nav tag.

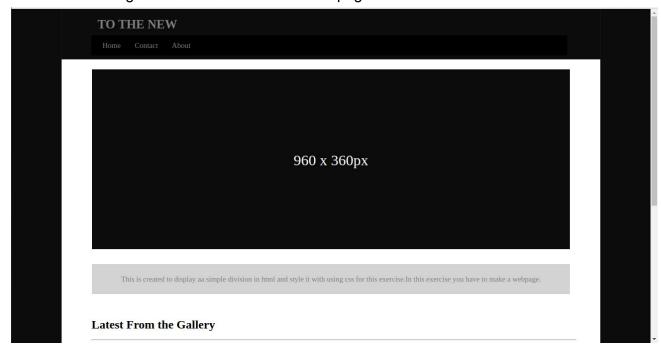
In other words, nav element represents section of page whose purpose is to provide navigational links, either in current document or to other document. The links in nav element may points to other webpages or to different sections of same webpage. It is semantic element. Common examples of nav element are menus, tables, contents, and indexes.

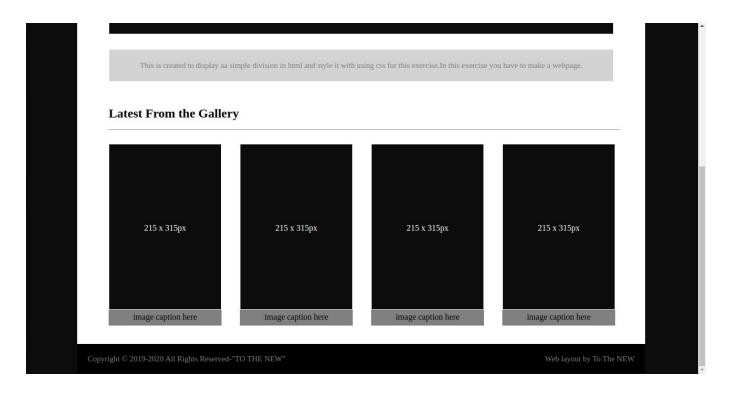
-This is an example of <nav> tag.

HTML | CSS | JavaScript | jQuery

11. Create HTML for web-page.jpg (check resources, highest weightage for answers).

Ans. The following is the Screenshot of the web-page:-

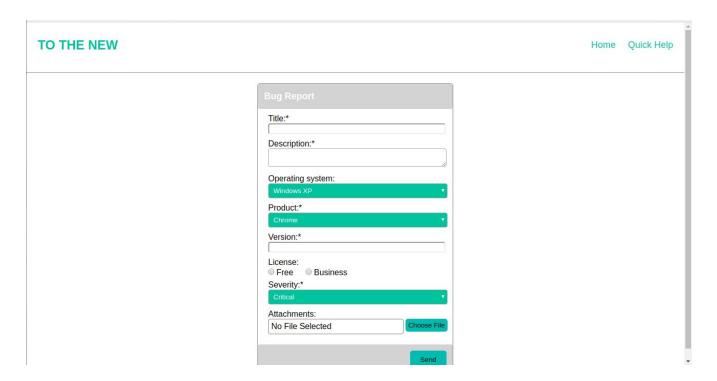




The code is present in the git Repository- bootcamp in html.zip file.

12. Create HTML for form.png (check resources, highest weightage for answers).

Ans. The following is the Screenshot of the form:-



The code is present in the git Repository- bootcamp in html.zip file.