Introduction to HTML/CSS

Name: Adish Jain

Email: adish.jain@tothenew.com

Exercise

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

Answer:

A block element always starts on a new line, and fills up the horizontal space left and right on the web page. You can add margins and padding on all four sides of any block element — top, right, left, and bottom.
Some examples of block elements are ** **and **<p>**tags.
Whereas,
Inline elements don't start on a new line, they appear on the same line as the content and tags beside them. Some examples of inline elements are ****, ****, and **<img>**tags.
When it comes to margins and padding, browsers treat inline elements differently. We can add space to the left and right on an inline element, but we cannot add height to the top or bottom padding or margin of an inline element. Inline elements can actually appear within block elements.

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

Answer:

display:none
removes the element from the normal flow of the page, allowing other elements to fill in.

Visibility:hidden
leaves the element in the normal flow of the page such that is still occupies space.

Question 3. Explain the clear and float properties.

FLOAT

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**

The clear property is directly related tofloats. If the element can fit horizontally in the space next to another element which is floated, it will. Unless you apply clear to that element in the same direction as the float. Then the element will move down below the floated element.

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

Relative:

1. An element with position: relative; is positioned relative to its normal position.
2. If you add no positioning attributes (top, left, bottom or right) on a relative element it will have no effect on it's positioning at all. It will behave exactly like a position: static element.
3. But if you do add some other positioning attribute, say, top: 10px;, it will shift its position 10 pixels down from where it would normally be.

Absolute:

1. An element with position: absolute; allows you to place any element exactly where you want it to be. You use the positioning attributes top, left, bottom. and right to set the location.
2. It is placed relative to the nearest non-static ancestor. If there is no such container, it is placed relative to the page itself.
3. It gets removed from the normal flow of elements on the page.

Static Position:

Static is the default type of positioning. When elements don’t have a position specifically set, they default to static. There’s not much you can do with a statically positioned element. These elements will stack in a standard one-after-another order. So in your code, whatever comes first will be displayed first, then the next element will be below it, and so on.

Fixed Position:

Fixed elements are completely independent of everything else on the web page. Regardless of any parents, a fixed position element will always be positioned based on the browser window. The interesting thing about fixed position elements is that when the page is scrolled, the element stays “fixed” and is always visible.

Question 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.

Question 6. Why do we use meta tags?

Metadata is data (information) about data.
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.
The metadata can be used by browsers (how to display content or reload page), search engines (keywords), or other web services.
HTML5 introduced a method to let web designers take control over the viewport (the user's visible area of a web page), through the <meta> tag (See "Setting The Viewport" example below).

Question 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. 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.

Example

```
div {
  width:300px;
  border:25px solid green;
  padding:25px;
  margin:25px;
}
```

Question 8. What are the different types of CSS Selectors?

CSS Selectors

CSS selectors are used to "find" (or select) HTML elements based on their element name, id, class, attribute, and more.

The element Selector

The element selector selects elements based on the element name.
You can select all <p> elements on a page like this (in this case, all <p> elements will be center-aligned, with a red text color).

The id Selector

The id selector uses the id attribute of an HTML element to select a specific element.
The id of an element should be 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.
The style rule below will be applied to the HTML element with id="para1".

The class Selector

The class selector selects elements with a specific class attribute.
To select elements with a specific class, write a period (.) character, followed by the name of the class.
In the example below, all HTML elements with class="center" will be red and center-aligned.

Question 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.
HTML5 is not based on SGML, and therefore does not require a reference to a DTD.

Question 10. Explain 5 HTML5 semantic tags.

Many web sites contain HTML code like: to indicate navigation, header, and footer.
HTML5 offers new semantic elements to define different parts of a web page:

- <article>
- <aside>
- <details>
- <figcaption>
- <figure>
- <footer>
- <header>
- <main>
- <mark>
- <nav>
- <section>
- <summary>
- <time>

HTML5 <section> Element

The <section> element defines a section in a document.

According to W3C's HTML5 documentation: "A section is a thematic grouping of content, typically with a heading."
A home page could normally be split into sections for introduction, content, and contact information.

Example

```
<section>
  <h1>WWF</h1>
  <p>The World Wide Fund for Nature (WWF) is....</p>
</section>
```

HTML5 <article> Element

The <article> element specifies independent, self-contained content.
An article should make sense on its own, and it should be possible to read it independently from the rest of the web site.
Examples of where an <article> element can be used:

- Forum post
- Blog post
- Newspaper article

Example

```
<article>
  <h1>What Does WWF Do?</h1>
  <p>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.</p>
</article>
```

HTML5 <header> Element

The <header> element specifies a header for a document or section.
The <header> element should be used as a container for introductory content.
You can have several <header> elements in one document.
The following example defines a header for an article:

Example

```
<article>
  <header>
```

```
    <h1>What Does WWF Do?</h1>
          <p>WWF's mission:</p>
  </header>
  <p>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.</p>
</article>
```

HTML5 <footer> Element

The <footer> element specifies a footer for a document or section.

A <footer> element should contain information about its containing element.

A footer typically contains the author of the document, copyright information, links to terms of use, contact information, etc.

You may have several <footer> elements in one document.

Example

```
<footer>
  <p>Posted by: Hege Refsnes</p>
  <p>Contact information: <ahref="mailto:someone@example.com">
  someone@example.com</a>.</p>
</footer>
```

HTML5 <nav> Element

The <nav> element defines a set of navigation links.

Notice that NOT all links of a document should be inside a <nav> element. The <nav> element is intended only for major block of navigation links.

Example

```
<nav>
  <ahref="/html/">HTML</a>|
  <ahref="/css/">CSS</a>|
  <ahref="/js/">JavaScript</a>|
  <ahref="/jquery/">jQuery</a>
</nav>
```

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

Answer
Uploaded On git under Question 11

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

Answer
Uploaded on git uder Question 12