

MODULE - II

Markup Languages: XHTML - An Introduction to HTML - HTML's History and Versions - Basic XHTML Syntax and Semantics - Some Fundamental HTML Elements. - Relative URLs - Lists - Tables - Frames - Forms - Defining XHTML's Abstract Syntax: XML - Creating HTML Documents - Style Sheets: CSS Introduction to Cascading Style Sheets - Cascading Style Sheet Features – CSS Core Syntax - Style Sheets and HTML - Style Rule Cascading and Inheritance - Text Properties - CSS Box Model

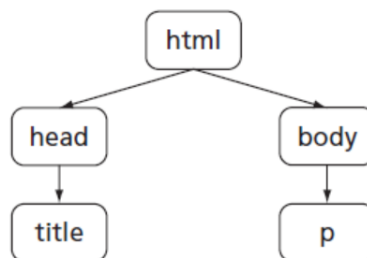
Actually, HTML is not a single language, but the name for a family of related languages that have evolved over the years. We will cover one of the newer members of this family, XHTML 1.0. In order to fully understand XHTML, you'll need some familiarity with another language, the Extensible Markup Language (XML). So we will also cover enough XML to allow you to understand the formal definition of XHTML 1.0. XML is important in other contexts as well

An Introduction to HTML

Before saying any more about the Hypertext Markup Language, let's briefly look at a small example file to gain a more concrete understanding of HTML syntax and semantics. The following HTML example presents an HTML "Hello World!" document. Figure 2.2 shows how this document would appear if it were opened using the Mozilla browser as discussed in the previous chapter (the figure may not look much like a browser window, because toolbars and menus

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>
HelloWorld.html
</title>
</head>
<body>
<p>
Hello World!
</p>
</body>
</html>
```

The body element contains the information that is to be displayed in the client area of the browser. This document's body contains a single paragraph (p) element. Notice that only the content of this element is displayed; the p start and end tags are used to inform the browser about the content and are not displayed themselves. A p element in particular tells the browser that its content represents a single paragraph of text (and possibly other elements) and should be displayed accordingly.



HTML

https://www.tutorialspoint.com/html/html_tutorial.pdf

CSS

<https://www.w3schools.com/css/default.asp>

Lists

OL-Ordered List

```
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
  <li>Boost</li>
</ol>
```

1. Coffee
2. Tea
3. Milk
4. Boost

UL-Unordered List

```
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
  <li>Boost</li>
</ul>
```

- Coffee
- Tea
- Milk
- Boost

Definition List

```
<dl>
  <dt>RAM</dt>
  <dd>Random Access Memory</dd>
  <dt>ROM</dt>
  <dd>Read Only Memory</dd>
</dl>
```

RAM

Random Access Memory

ROM

Read Only Memory

```
</html>
```

```
</body>
```

The <table> tag defines an HTML table.

Each table row is defined with a <tr> tag. Each table header is defined with a <th> tag. Each table data/cell is defined with a <td> tag.

By default, the text in <th> elements are bold and centered.

By default, the text in <td> elements are regular and left-aligned.

<h2>An unordered HTML list</h2>

```
<TABLE BORDER=1>
  <TR><TH>SLNO</TH><TH>Product</TH><TH>PRICE</TH></TR>
  <TR><TD>01</TD><TD>HAMMAM</TD><TD>50</TD></TR>
  <TR>
  <TD>02</TD>
  <TD>LUX</TD>
  <TD>35</TD>
  </TR>
</TABLE>
</body>
</html>
```

An unordered HTML list

SLNO	Product	PRICE
01	HAMMAM	50
02	LUX	35

Forms in HTML

```
<form action="one.php">
Name <input type=text name=t1><br><br>
Age <input type=number name=t2 value=18><br><br>
DOB <input type=date><br><br>
Color <input type=color><br><br>
Tiffen: <br><input type=radio name=abc>Idly<br>
<input type=radio name=abc>Dosa<br>
<input type=radio name=abc>Pongal<br>
<br><br>
Side: Sambar<input type=checkbox>
Chattini<input type=checkbox>

Temp. <input type=range max=100 min=0>
<br><br>
Attach <input type="file">
```

```

<br><br>
Birth Time <input type=time><br><br>
<input type="hidden" name=t5 value=90>
Password <input type="password"><br><br>
<input type="reset">
<input type="submit">
</form>

```

The screenshot shows a web form with the following elements:

- Name:
- Age:
- DOB: with a calendar icon
- Color:
- Tiffen:
 - Idly
 - Dosa
 - Pongal
- Side: Sambar Chattini Temp.
- Attach: No file chosen
- Birth Time: with a clock icon
- Password:
-

```

<HTML>
<style>
.s1 {
  border: 5px outset red;
  background-color: black;
  text-align: center;
}
.m1{
  color:yellow;
}
.m2{ color: cyan; }
</style>
<div class=s1>
  <div class=m1>Welcome to AAGASC</div>
  <div class=m2>Department of CS</div>
</s1>
</HTML>

```

Welcome to AAGASC Department of CS

TABLE 3.5 Additional Font Style Properties

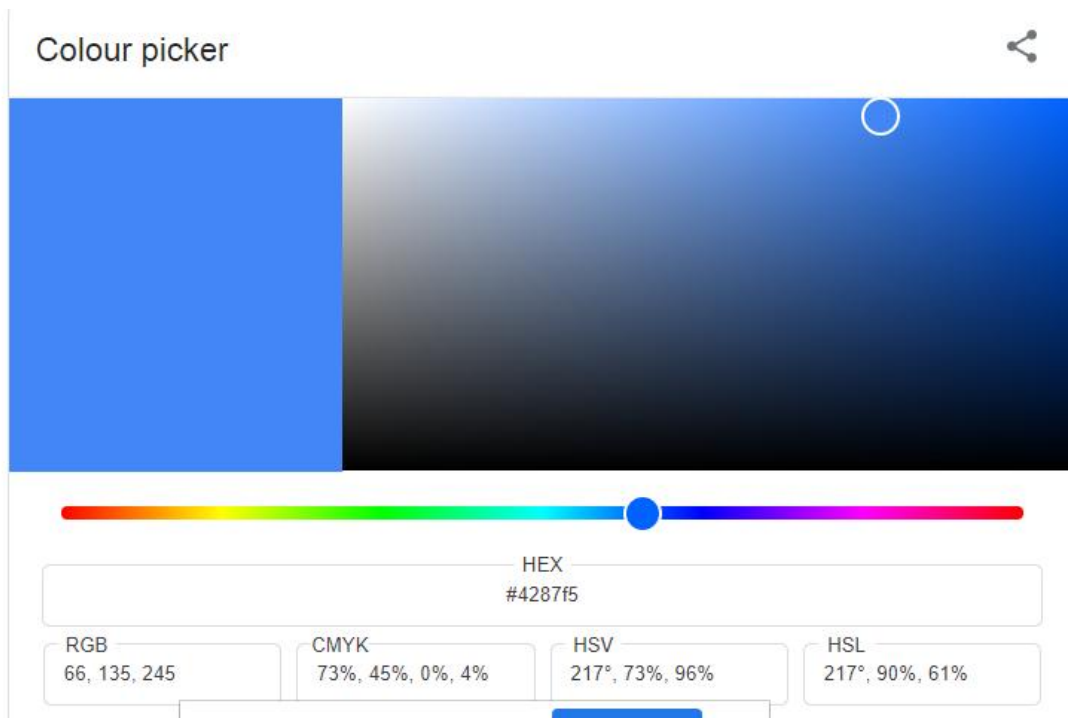
Property	Possible Values
font-style	normal (initial value), italic (more cursive than normal), or oblique (more slanted than normal)
font-weight	bold or normal (initial value) are standard values, although other values can be used with font families having multiple gradations of boldness (see CSS2 [W3C-CSS-2.0] for details)
font-variant	small-caps, which displays lowercase characters using uppercase glyphs (small uppercase glyphs if possible), or normal (initial value)

TABLE 3.6 Primary CSS Text Properties

Property	Values
text-decoration	none (initial value), underline, overline, line-through, or space-separated list of values other than none.
letter-spacing	normal (initial value) or a length representing additional space to be included between adjacent letters in words. Negative value indicates space to be removed.
word-spacing	normal (initial value) or a length representing additional space to be included between adjacent words. Negative value indicates space to be removed.
text-transform	none (initial value), capitalize (capitalizes first letter of each word), uppercase (converts all text to uppercase), lowercase (converts all text to lowercase).
text-indent	Length (initial value 0) or percentage of box width, possibly negative. Specify for block elements and table cells to indent text within first line box.
text-align	left (initial value for left-to-right contexts), right, center, or justified. Specify for block elements and table cells.
white-space	normal (initial value), pre. Use to indicate whether or not white space should be retained.

TABLE 3.7 Alternative Formats for Specifying Numeric Color Values

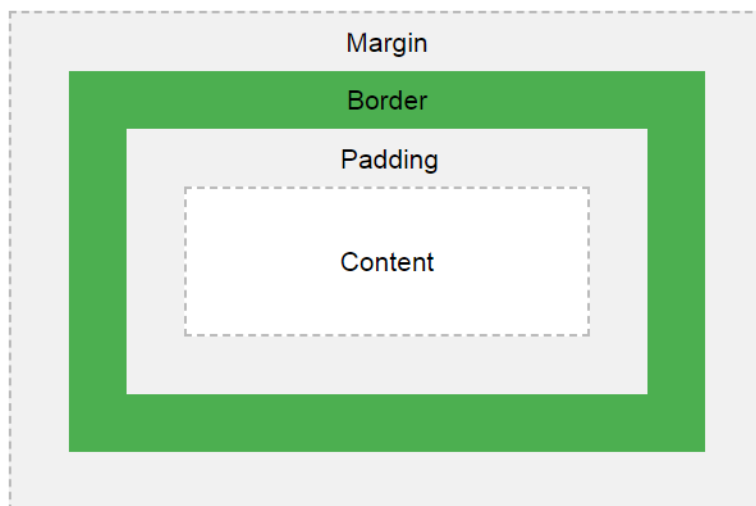
Format	Example	Meaning
Functional, integer arguments	rgb(255, 170, 0)	Use arguments as RGB values.
Functional, percentage arguments	rgb(100%, 66.7%, 0%)	Multiply arguments by 255 and round to obtain RGB values (at most one decimal place allowed in arguments).
Hexadecimal	#ffaa00	The first pair of hexadecimal digits represents the red intensity; the second and third represent green and blue, respectively.
Abbreviated hexadecimal	#fa0	Duplicate the first hexadecimal digit to obtain red intensity; duplicate the second and third to obtain green and blue, respectively.



The CSS 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:



Box Model Example

```
<!DOCTYPE html>
<html>
<head>
<style>
div {
width: 320px;
padding: 10px;
border: 5px solid black;
margin: 0px;
}
</style>
</head>
<body>
```

```
<h2>Calculate the total width:</h2>
```

```

<div>The picture above is 350px wide. The total width of this element is also
350px.</div> <br>
<div>This is Web Technology Class, Now you are watching BOX Model in HTML
CSS </div>
</body>
</html>
```

Calculate the total width:



The picture above is 350px wide. The total width of this element is also 350px.

This is Web Technology Class, Now you are watching BOX Model in HTML CSS