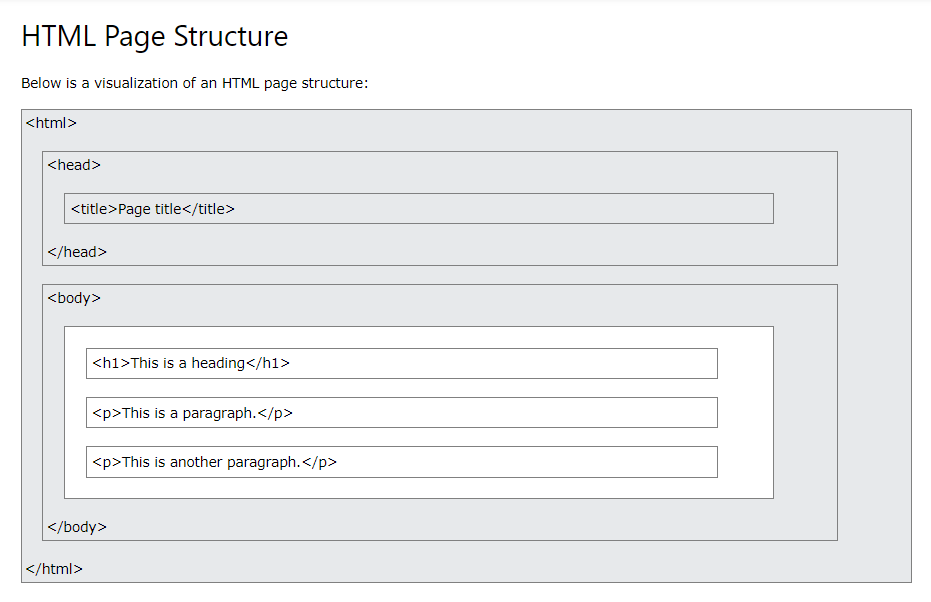
What is HTML?

* HTML stands for Hyper Text Markup Language
* HTML is the standard markup language for creating Web pages
* HTML describes the structure of a Web page
* HTML consists of a series of elements
* HTML elements tell the browser how to display the content
* HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

### **Example**

<!DOCTYPE html>  
<html>  
<head>  
<title>Page Title</title>  
</head>  
<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>  
</html>

* The <!DOCTYPE html> declaration defines that this document is an HTML5 document
* The <html> element is the root element of an HTML page
* The <head> element contains meta information about the HTML page
* The <title> element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
* The <body> element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
* The <h1> element defines a large heading
* The <p> element defines a paragraph



## HTML History

Since the early days of the World Wide Web, there have been many versions of HTML:

|  |  |
| --- | --- |
| **Year** | **Version** |
| 1989 | Tim Berners-Lee invented www |
| 1991 | Tim Berners-Lee invented HTML |
| 1993 | Dave Raggett drafted HTML+ |
| 1995 | HTML Working Group defined HTML 2.0 |
| 1997 | W3C Recommendation: HTML 3.2 |
| 1999 | W3C Recommendation: HTML 4.01 |
| 2000 | W3C Recommendation: XHTML 1.0 |
| 2008 | WHATWG HTML5 First Public Draft |
| 2012 | [WHATWG HTML5 Living Standard](http://whatwg.org/html/) |
| 2014 | [W3C Recommendation: HTML5](http://www.w3.org/TR/html5/) |
| 2016 | W3C Candidate Recommendation: HTML 5.1 |
| 2017 | [W3C Recommendation: HTML5.1 2nd Edition](http://www.w3.org/TR/html51/) |
| 2017 | [W3C Recommendation: HTML5.2](http://www.w3.org/TR/html52/) |

**HTML Layout Elements**

HTML has several semantic elements that define the different parts of a web page:

|  |  |
| --- | --- |
| HTML5 Semantic Elements | * <header> - Defines a header for a document or a section * <nav> - Defines a set of navigation links * <section> - Defines a section in a document * <article> - Defines an independent, self-contained content * <aside> - Defines content aside from the content (like a sidebar) * <footer> - Defines a footer for a document or a section * <details> - Defines additional details that the user can open and close on demand * <summary> - Defines a heading for the <details> element   You can read more about semantic elements in our [HTML Semantics](https://www.w3schools.com/html/html5_semantic_elements.asp) chapter. |

**HTML Layout Techniques**

There are four different techniques to create multicolumn layouts. Each technique has its pros and cons:

* CSS framework
* CSS float property
* CSS flexbox
* CSS grid

Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. CSS3 is a latest standard of css earlier versions (CSS2). The main difference between css2 and css3 is follows −

* Media Queries
* Namespaces
* Selectors Level 3
* Color

**CSS3 modules**

CSS3 is collaboration of CSS2 specifications and new specifications, we can called this collaboration is **module**. Some of the modules are shown below −

* Selectors
* Box Model
* Backgrounds
* Image Values and Replaced Content
* Text Effects
* 2D Transformations
* 3D Transformations
* Animations
* Multiple Column Layout
* User Interface

**WHAT IS CSS?**

CSS stands for Cascading Style Sheets. CSS is a standard style sheet language used for describing the presentation (i.e. the layout and formatting) of the web pages.

Prior to CSS, nearly all of the presentational attributes of HTML documents were contained within the HTML markup (specifically inside the HTML tags); all the font colors, background styles, element alignments, borders and sizes had to be explicitly described within the HTML.

As a result, development of the large websites became a long and expensive process, since the style information were repeatedly added to every single page of the website.

To solve this problem CSS was introduced in 1996 by the World Wide Web Consortium (W3C), which also maintains its standard. CSS was designed to enable the separation of presentation and content. Now web designers can move the formatting information of the web pages to a separate style sheet which results in considerably simpler HTML markup, and better maintainability.

CSS3 is the latest version of the CSS specification. CSS3 adds several new styling features and improvements to enhance the web presentation capabilities.

## What You Can Do with CSS

There are lot more things you can do with CSS.

* You can easily apply same style rules on multiple elements.
* You can control the presentation of multiple pages of a website with a single style sheet.
* You can present the same page differently on different devices.
* You can style dynamic states of elements such as hover, focus, etc. that isn't possible otherwise.
* You can change the position of an element on a web page without changing the markup.
* You can alter the display of existing HTML elements.
* You can transform elements like scale, rotate, skew, etc. in 2D or 3D space.
* You can create animations and transitions effects without using any JavaScript.
* You can create print friendly version of your web pages.

The list does not end here, there are many other interesting things that you can do with CSS. You will learn about all of them in detail in upcoming chapters.

## Advantages of Using CSS

The biggest advantage of CSS is that it allows the separation of style and layout from the content of the document. Here are some more advantages, why one should start using CSS?

* **CSS Save Lots of Time** — CSS gives lots of flexibility to set the style properties of an element. You can write CSS once; and then the same code can be applied to the groups of HTML elements, and can also be reused in multiple HTML pages.
* **Easy Maintenance** — CSS provides an easy means to update the formatting of the documents, and to maintain the consistency across multiple documents. Because the content of the entire set of web pages can be easily controlled using one or more style sheets.
* **Pages Load Faster** — CSS enables multiple pages to share the formatting information, which reduces complexity and repetition in the structural contents of the documents. It significantly reduces the file transfer size, which results in a faster page loading.
* **Superior Styles to HTML** — CSS has much wider presentation capabilities than HTML and provide much better control over the layout of your web pages. So you can give far better look to your web pages in comparison to the HTML presentational elements and attributes.
* **Multiple Device Compatibility** — CSS also allows web pages to be optimized for more than one type of device or media. Using CSS the same HTML document can be presented in different viewing styles for different rendering devices such as desktop, cell phones, etc.

**CSS3 Properties**

|  |  |
| --- | --- |
| **Property** | **Description** |
| [align-content](https://www.tutorialrepublic.com/css-reference/css3-align-content-property.php) | Specifies the alignment of flexible container's items within the flex container. |
| [align-items](https://www.tutorialrepublic.com/css-reference/css3-align-items-property.php) | Specifies the default alignment for items within the flex container. |
| [align-self](https://www.tutorialrepublic.com/css-reference/css3-align-self-property.php) | Specifies the alignment for selected items within the flex container. |
| [animation](https://www.tutorialrepublic.com/css-reference/css3-animation-property.php) | Specifies the keyframe-based animations. |
| [animation-delay](https://www.tutorialrepublic.com/css-reference/css3-animation-delay-property.php) | Specifies when the animation will start. |
| [animation-direction](https://www.tutorialrepublic.com/css-reference/css3-animation-direction-property.php) | Specifies whether the animation should play in reverse on alternate cycles or not. |
| [animation-duration](https://www.tutorialrepublic.com/css-reference/css3-animation-duration-property.php) | Specifies the number of seconds or milliseconds an animation should take to complete one cycle. |
| [animation-fill-mode](https://www.tutorialrepublic.com/css-reference/css3-animation-fill-mode-property.php) | Specifies how a CSS animation should apply styles to its target before and after it is executing. |
| [animation-iteration-count](https://www.tutorialrepublic.com/css-reference/css3-animation-iteration-count-property.php) | Specifies the number of times an animation cycle should be played before stopping. |
| [animation-name](https://www.tutorialrepublic.com/css-reference/css3-animation-name-property.php) | [Specifies the name of @keyframes defined animations that should be applied to the selected element.](https://www.tutorialrepublic.com/css-reference/css3-keyframes-rule.php) |
| [animation-play-state](https://www.tutorialrepublic.com/css-reference/css3-animation-play-state-property.php) | Specifies whether the animation is running or paused. |
| [animation-timing-function](https://www.tutorialrepublic.com/css-reference/css3-animation-timing-function-property.php) | Specifies how a CSS animation should progress over the duration of each cycle. |
| [backface-visibility](https://www.tutorialrepublic.com/css-reference/css3-backface-visibility-property.php) | Specifies whether or not the "back" side of a transformed element is visible when facing the user. |
| [background](https://www.tutorialrepublic.com/css-reference/css-background-property.php) | Defines a variety of background properties within one declaration. |
| [background-attachment](https://www.tutorialrepublic.com/css-reference/css-background-attachment-property.php) | Specify whether the background image is fixed in the viewport or scrolls. |
| [background-clip](https://www.tutorialrepublic.com/css-reference/css3-background-clip-property.php) | Specifies the painting area of the background. |
| [background-color](https://www.tutorialrepublic.com/css-reference/css-background-color-property.php) | Defines an element's background color. |
| [background-image](https://www.tutorialrepublic.com/css-reference/css-background-image-property.php) | Defines an element's background image. |
| [background-origin](https://www.tutorialrepublic.com/css-reference/css3-background-origin-property.php) | Specifies the positioning area of the background images. |
| [background-position](https://www.tutorialrepublic.com/css-reference/css-background-position-property.php) | Defines the origin of a background image. |
| [background-repeat](https://www.tutorialrepublic.com/css-reference/css-background-repeat-property.php) | Specify whether/how the background image is tiled. |
| [background-size](https://www.tutorialrepublic.com/css-reference/css3-background-size-property.php) | Specifies the size of the background images. |
| [border](https://www.tutorialrepublic.com/css-reference/css-border-property.php) | Sets the width, style, and color for all four sides of an element's border. |
| [border-bottom](https://www.tutorialrepublic.com/css-reference/css-border-bottom-property.php) | Sets the width, style, and color of the bottom border of an element. |
| [border-bottom-color](https://www.tutorialrepublic.com/css-reference/css-border-bottom-color-property.php) | Sets the color of the bottom border of an element. |
| [border-bottom-left-radius](https://www.tutorialrepublic.com/css-reference/css3-border-bottom-left-radius-property.php) | Defines the shape of the bottom-left border corner of an element. |
| [border-bottom-right-radius](https://www.tutorialrepublic.com/css-reference/css3-border-bottom-right-radius-property.php) | Defines the shape of the bottom-right border corner of an element. |
| [border-bottom-style](https://www.tutorialrepublic.com/css-reference/css-border-bottom-style-property.php) | Sets the style of the bottom border of an element. |
| [border-bottom-width](https://www.tutorialrepublic.com/css-reference/css-border-bottom-width-property.php) | Sets the width of the bottom border of an element. |
| [border-collapse](https://www.tutorialrepublic.com/css-reference/css-border-collapse-property.php) | Specifies whether table cell borders are connected or separated. |
| [border-color](https://www.tutorialrepublic.com/css-reference/css-border-color-property.php) | Sets the color of the border on all the four sides of an element. |
| [border-image](https://www.tutorialrepublic.com/css-reference/css3-border-image-property.php) | Specifies how an image is to be used in place of the border styles. |
| [border-image-outset](https://www.tutorialrepublic.com/css-reference/css3-border-image-outset-property.php) | Specifies the amount by which the border image area extends beyond the border box. |
| [border-image-repeat](https://www.tutorialrepublic.com/css-reference/css3-border-image-repeat-property.php) | Specifies whether the image-border should be repeated, rounded or stretched. |
| [border-image-slice](https://www.tutorialrepublic.com/css-reference/css3-border-image-slice-property.php) | Specifies the inward offsets of the image-border. |
| [border-image-source](https://www.tutorialrepublic.com/css-reference/css3-border-image-source-property.php) | Specifies the location of the image to be used as a border. |
| [border-image-width](https://www.tutorialrepublic.com/css-reference/css3-border-image-width-property.php) | Specifies the width of the image-border. |
| [border-left](https://www.tutorialrepublic.com/css-reference/css-border-left-property.php) | Sets the width, style, and color of the left border of an element. |
| [border-left-color](https://www.tutorialrepublic.com/css-reference/css-border-left-color-property.php) | Sets the color of the left border of an element. |
| [border-left-style](https://www.tutorialrepublic.com/css-reference/css-border-left-style-property.php) | Sets the style of the left border of an element. |
| [border-left-width](https://www.tutorialrepublic.com/css-reference/css-border-left-width-property.php) | Sets the width of the left border of an element. |
| [border-radius](https://www.tutorialrepublic.com/css-reference/css3-border-radius-property.php) | Defines the shape of the border corners of an element. |
| [border-right](https://www.tutorialrepublic.com/css-reference/css-border-right-property.php) | Sets the width, style, and color of the right border of an element. |
| [border-right-color](https://www.tutorialrepublic.com/css-reference/css-border-right-color-property.php) | Sets the color of the right border of an element. |
| [border-right-style](https://www.tutorialrepublic.com/css-reference/css-border-right-style-property.php) | Sets the style of the right border of an element. |
| [border-right-width](https://www.tutorialrepublic.com/css-reference/css-border-right-width-property.php) | Sets the width of the right border of an element. |
| [border-spacing](https://www.tutorialrepublic.com/css-reference/css-border-spacing-property.php) | Sets the spacing between the borders of adjacent table cells. |
| [border-style](https://www.tutorialrepublic.com/css-reference/css-border-style-property.php) | Sets the style of the border on all the four sides of an element. |
| [border-top](https://www.tutorialrepublic.com/css-reference/css-border-top-property.php) | Sets the width, style, and color of the top border of an element. |
| [border-top-color](https://www.tutorialrepublic.com/css-reference/css-border-top-color-property.php) | Sets the color of the top border of an element. |
| [border-top-left-radius](https://www.tutorialrepublic.com/css-reference/css3-border-top-left-radius-property.php) | Defines the shape of the top-left border corner of an element. |
| [border-top-right-radius](https://www.tutorialrepublic.com/css-reference/css3-border-top-right-radius-property.php) | Defines the shape of the top-right border corner of an element. |
| [border-top-style](https://www.tutorialrepublic.com/css-reference/css-border-top-style-property.php) | Sets the style of the top border of an element. |
| [border-top-width](https://www.tutorialrepublic.com/css-reference/css-border-top-width-property.php) | Sets the width of the top border of an element. |
| [border-width](https://www.tutorialrepublic.com/css-reference/css-border-width-property.php) | Sets the width of the border on all the four sides of an element. |
| [bottom](https://www.tutorialrepublic.com/css-reference/css-bottom-property.php) | Specify the location of the bottom edge of the positioned element. |
| [box-shadow](https://www.tutorialrepublic.com/css-reference/css3-box-shadow-property.php) | Applies one or more drop-shadows to the element's box. |
| [box-sizing](https://www.tutorialrepublic.com/css-reference/css3-box-sizing-property.php) | Alter the default CSS box model. |
| [caption-side](https://www.tutorialrepublic.com/css-reference/css-caption-side-property.php) | Specify the position of table's caption. |
| [clear](https://www.tutorialrepublic.com/css-reference/css-clear-property.php) | Specifies the placement of an element in relation to floating elements. |
| [clip](https://www.tutorialrepublic.com/css-reference/css-clip-property.php) | Defines the clipping region. |
| [color](https://www.tutorialrepublic.com/css-reference/css-color-property.php) | Specify the color of the text of an element. |
| [column-count](https://www.tutorialrepublic.com/css-reference/css3-column-count-property.php) | Specifies the number of columns in a multi-column element. |
| [column-fill](https://www.tutorialrepublic.com/css-reference/css3-column-fill-property.php) | Specifies how columns will be filled. |
| [column-gap](https://www.tutorialrepublic.com/css-reference/css3-column-gap-property.php) | Specifies the gap between the columns in a multi-column element. |
| [column-rule](https://www.tutorialrepublic.com/css-reference/css3-column-rule-property.php) | Specifies a straight line, or "rule", to be drawn between each column in a multi-column element. |
| [column-rule-color](https://www.tutorialrepublic.com/css-reference/css3-column-rule-color-property.php) | Specifies the color of the rules drawn between columns in a multi-column layout. |
| [column-rule-style](https://www.tutorialrepublic.com/css-reference/css3-column-rule-style-property.php) | Specifies the style of the rule drawn between the columns in a multi-column layout. |
| [column-rule-width](https://www.tutorialrepublic.com/css-reference/css3-column-rule-width-property.php) | Specifies the width of the rule drawn between the columns in a multi-column layout. |
| [column-span](https://www.tutorialrepublic.com/css-reference/css3-column-span-property.php) | Specifies how many columns an element spans across in a multi-column layout. |
| [column-width](https://www.tutorialrepublic.com/css-reference/css3-column-width-property.php) | Specifies the optimal width of the columns in a multi-column element. |
| [columns](https://www.tutorialrepublic.com/css-reference/css3-columns-property.php) | A shorthand property for setting column-width and column-count properties. |
| [content](https://www.tutorialrepublic.com/css-reference/css-content-property.php) | Inserts generated content. |
| [counter-increment](https://www.tutorialrepublic.com/css-reference/css-counter-increment-property.php) | Increments one or more counter values. |
| [counter-reset](https://www.tutorialrepublic.com/css-reference/css-counter-reset-property.php) | Creates or resets one or more counters. |
| [cursor](https://www.tutorialrepublic.com/css-reference/css-cursor-property.php) | Specify the type of cursor. |
| [direction](https://www.tutorialrepublic.com/css-reference/css-direction-property.php) | Define the text direction/writing direction. |
| [display](https://www.tutorialrepublic.com/css-reference/css-display-property.php) | Specifies how an element is displayed onscreen. |
| [empty-cells](https://www.tutorialrepublic.com/css-reference/css-empty-cells-property.php) | Show or hide borders and backgrounds of empty table cells. |
| [flex](https://www.tutorialrepublic.com/css-reference/css3-flex-property.php) | Specifies the components of a flexible length. |
| [flex-basis](https://www.tutorialrepublic.com/css-reference/css3-flex-basis-property.php) | Specifies the initial main size of the flex item. |
| [flex-direction](https://www.tutorialrepublic.com/css-reference/css3-flex-direction-property.php) | Specifies the direction of the flexible items. |
| [flex-flow](https://www.tutorialrepublic.com/css-reference/css3-flex-flow-property.php) | A shorthand property for the flex-direction and the flex-wrap properties. |
| [flex-grow](https://www.tutorialrepublic.com/css-reference/css3-flex-grow-property.php) | Specifies how the flex item will grow relative to the other items inside the flex container. |
| [flex-shrink](https://www.tutorialrepublic.com/css-reference/css3-flex-shrink-property.php) | Specifies how the flex item will shrink relative to the other items inside the flex container. |
| [flex-wrap](https://www.tutorialrepublic.com/css-reference/css3-flex-wrap-property.php) | Specifies whether the flexible items should wrap or not. |
| [float](https://www.tutorialrepublic.com/css-reference/css-float-property.php) | Specifies whether or not a box should float. |
| [font](https://www.tutorialrepublic.com/css-reference/css-font-property.php) | Defines a variety of font properties within one declaration. |
| [font-family](https://www.tutorialrepublic.com/css-reference/css-font-family-property.php) | Defines a list of fonts for element. |
| [font-size](https://www.tutorialrepublic.com/css-reference/css-font-size-property.php) | Defines the font size for the text. |
| [font-size-adjust](https://www.tutorialrepublic.com/css-reference/css3-font-size-adjust-property.php) | Preserves the readability of text when font fallback occurs. |
| [font-stretch](https://www.tutorialrepublic.com/css-reference/css3-font-stretch-property.php) | Selects a normal, condensed, or expanded face from a font. |
| [font-style](https://www.tutorialrepublic.com/css-reference/css-font-style-property.php) | Defines the font style for the text. |
| [font-variant](https://www.tutorialrepublic.com/css-reference/css-font-variant-property.php) | Specify the font variant. |
| [font-weight](https://www.tutorialrepublic.com/css-reference/css-font-weight-property.php) | Specify the font weight of the text. |
| [height](https://www.tutorialrepublic.com/css-reference/css-height-property.php) | Specify the height of an element. |
| [justify-content](https://www.tutorialrepublic.com/css-reference/css3-justify-content-property.php) | Specifies how flex items are aligned along the main axis of the flex container after any flexible lengths and auto margins have been resolved. |
| [left](https://www.tutorialrepublic.com/css-reference/css-left-property.php) | Specify the location of the left edge of the positioned element. |
| [letter-spacing](https://www.tutorialrepublic.com/css-reference/css-letter-spacing-property.php) | Sets the extra spacing between letters. |
| [line-height](https://www.tutorialrepublic.com/css-reference/css-line-height-property.php) | Sets the height between lines of text. |
| [list-style](https://www.tutorialrepublic.com/css-reference/css-list-style-property.php) | Defines the display style for a list and list elements. |
| [list-style-image](https://www.tutorialrepublic.com/css-reference/css-list-style-image-property.php) | Specifies the image to be used as a list-item marker. |
| [list-style-position](https://www.tutorialrepublic.com/css-reference/css-list-style-position-property.php) | Specifies the position of the list-item marker. |
| [list-style-type](https://www.tutorialrepublic.com/css-reference/css-list-style-type-property.php) | Specifies the marker style for a list-item. |
| [margin](https://www.tutorialrepublic.com/css-reference/css-margin-property.php) | Sets the margin on all four sides of the element. |
| [margin-bottom](https://www.tutorialrepublic.com/css-reference/css-margin-bottom-property.php) | Sets the bottom margin of the element. |
| [margin-left](https://www.tutorialrepublic.com/css-reference/css-margin-left-property.php) | Sets the left margin of the element. |
| [margin-right](https://www.tutorialrepublic.com/css-reference/css-margin-right-property.php) | Sets the right margin of the element. |
| [margin-top](https://www.tutorialrepublic.com/css-reference/css-margin-top-property.php) | Sets the top margin of the element. |
| [max-height](https://www.tutorialrepublic.com/css-reference/css-max-height-property.php) | Specify the maximum height of an element. |
| [max-width](https://www.tutorialrepublic.com/css-reference/css-max-width-property.php) | Specify the maximum width of an element. |
| [min-height](https://www.tutorialrepublic.com/css-reference/css-min-height-property.php) | Specify the minimum height of an element. |
| [min-width](https://www.tutorialrepublic.com/css-reference/css-min-width-property.php) | Specify the minimum width of an element. |
| [opacity](https://www.tutorialrepublic.com/css-reference/css3-opacity-property.php) | Specifies the transparency of an element. |
| [order](https://www.tutorialrepublic.com/css-reference/css3-order-property.php) | Specifies the order in which a flex items are displayed and laid out within a flex container. |
| [outline](https://www.tutorialrepublic.com/css-reference/css-outline-property.php) | Sets the width, style, and color for all four sides of an element's outline. |
| [outline-color](https://www.tutorialrepublic.com/css-reference/css-outline-color-property.php) | Sets the color of the outline. |
| [outline-offset](https://www.tutorialrepublic.com/css-reference/css3-outline-offset-property.php) | Set the space between an outline and the border edge of an element. |
| [outline-style](https://www.tutorialrepublic.com/css-reference/css-outline-style-property.php) | Sets a style for an outline. |
| [outline-width](https://www.tutorialrepublic.com/css-reference/css-outline-width-property.php) | Sets the width of the outline. |
| [overflow](https://www.tutorialrepublic.com/css-reference/css-overflow-property.php) | Specifies the treatment of content that overflows the element's box. |
| [overflow-x](https://www.tutorialrepublic.com/css-reference/css3-overflow-x-property.php) | Specifies the treatment of content that overflows the element's box horizontally. |
| [overflow-y](https://www.tutorialrepublic.com/css-reference/css3-overflow-y-property.php) | Specifies the treatment of content that overflows the element's box vertically. |
| [padding](https://www.tutorialrepublic.com/css-reference/css-padding-property.php) | Sets the padding on all four sides of the element. |
| [padding-bottom](https://www.tutorialrepublic.com/css-reference/css-padding-bottom-property.php) | Sets the padding to the bottom side of an element. |
| [padding-left](https://www.tutorialrepublic.com/css-reference/css-padding-left-property.php) | Sets the padding to the left side of an element. |
| [padding-right](https://www.tutorialrepublic.com/css-reference/css-padding-right-property.php) | Sets the padding to the right side of an element. |
| [padding-top](https://www.tutorialrepublic.com/css-reference/css-padding-top-property.php) | Sets the padding to the top side of an element. |
| [page-break-after](https://www.tutorialrepublic.com/css-reference/css-page-break-after-property.php) | Insert a page breaks after an element. |
| [page-break-before](https://www.tutorialrepublic.com/css-reference/css-page-break-before-property.php) | Insert a page breaks before an element. |
| [page-break-inside](https://www.tutorialrepublic.com/css-reference/css-page-break-inside-property.php) | Insert a page breaks inside an element. |
| [perspective](https://www.tutorialrepublic.com/css-reference/css3-perspective-property.php) | Defines the perspective from which all child elements of the object are viewed. |
| [perspective-origin](https://www.tutorialrepublic.com/css-reference/css3-perspective-origin-property.php) | Defines the origin (the vanishing point for the 3D space) for the perspective property. |
| [position](https://www.tutorialrepublic.com/css-reference/css-position-property.php) | Specifies how an element is positioned. |
| [quotes](https://www.tutorialrepublic.com/css-reference/css-quotes-property.php) | Specifies quotation marks for embedded quotations. |
| [resize](https://www.tutorialrepublic.com/css-reference/css3-resize-property.php) | Specifies whether or not an element is resizable by the user. |
| [right](https://www.tutorialrepublic.com/css-reference/css-right-property.php) | Specify the location of the right edge of the positioned element. |
| [tab-size](https://www.tutorialrepublic.com/css-reference/css3-tab-size-property.php) | Specifies the length of the tab character. |
| [table-layout](https://www.tutorialrepublic.com/css-reference/css-table-layout-property.php) | Specifies a table layout algorithm. |
| [text-align](https://www.tutorialrepublic.com/css-reference/css-text-align-property.php) | Sets the horizontal alignment of inline content. |
| [text-align-last](https://www.tutorialrepublic.com/css-reference/css3-text-align-last-property.php) | [Specifies how the last line of a block or a line right before a forced line break is aligned when text-align is justify.](https://www.tutorialrepublic.com/css-reference/css-text-align-property.php) |
| [text-decoration](https://www.tutorialrepublic.com/css-reference/css-text-decoration-property.php) | Specifies the decoration added to text. |
| [text-decoration-color](https://www.tutorialrepublic.com/css-reference/css3-text-decoration-color-property.php) | [Specifies the color of the text-decoration-line.](https://www.tutorialrepublic.com/css-reference/css3-text-decoration-line-property.php) |
| [text-decoration-line](https://www.tutorialrepublic.com/css-reference/css3-text-decoration-line-property.php) | Specifies what kind of line decorations are added to the element. |
| [text-decoration-style](https://www.tutorialrepublic.com/css-reference/css3-text-decoration-style-property.php) | [Specifies the style of the lines specified by the text-decoration-line property](https://www.tutorialrepublic.com/css-reference/css3-text-decoration-line-property.php) |
| [text-indent](https://www.tutorialrepublic.com/css-reference/css-text-indent-property.php) | Indent the first line of text. |
| [text-justify](https://www.tutorialrepublic.com/css-reference/css3-text-justify-property.php) | [Specifies the justification method to use when the text-align property is set to justify.](https://www.tutorialrepublic.com/css-reference/css-text-align-property.php) |
| [text-overflow](https://www.tutorialrepublic.com/css-reference/css3-text-overflow-property.php) | Specifies how the text content will be displayed, when it overflows the block containers. |
| [text-shadow](https://www.tutorialrepublic.com/css-reference/css3-text-shadow-property.php) | Applies one or more shadows to the text content of an element. |
| [text-transform](https://www.tutorialrepublic.com/css-reference/css-text-transform-property.php) | Transforms the case of the text. |
| [top](https://www.tutorialrepublic.com/css-reference/css-top-property.php) | Specify the location of the top edge of the positioned element. |
| [transform](https://www.tutorialrepublic.com/css-reference/css3-transform-property.php) | Applies a 2D or 3D transformation to an element. |
| [transform-origin](https://www.tutorialrepublic.com/css-reference/css3-transform-origin-property.php) | Defines the origin of transformation for an element. |
| [transform-style](https://www.tutorialrepublic.com/css-reference/css3-transform-style-property.php) | Specifies how nested elements are rendered in 3D space. |
| [transition](https://www.tutorialrepublic.com/css-reference/css3-transition-property.php) | Defines the transition between two states of an element. |
| [transition-delay](https://www.tutorialrepublic.com/css-reference/css3-transition-delay-property.php) | Specifies when the transition effect will start. |
| [transition-duration](https://www.tutorialrepublic.com/css-reference/css3-transition-duration-property.php) | Specifies the number of seconds or milliseconds a transition effect should take to complete. |
| [transition-property](https://www.tutorialrepublic.com/css-reference/css3-transition-property-property.php) | Specifies the names of the CSS properties to which a transition effect should be applied. |
| [transition-timing-function](https://www.tutorialrepublic.com/css-reference/css3-transition-timing-function-property.php) | Specifies the speed curve of the transition effect. |
| [vertical-align](https://www.tutorialrepublic.com/css-reference/css-vertical-align-property.php) | Sets the vertical positioning of an element relative to the current text baseline. |
| [visibility](https://www.tutorialrepublic.com/css-reference/css-visibility-property.php) | Specifies whether or not an element is visible. |
| [white-space](https://www.tutorialrepublic.com/css-reference/css-white-space-property.php) | Specifies how white space inside the element is handled. |
| [width](https://www.tutorialrepublic.com/css-reference/css-width-property.php) | Specify the width of an element. |
| [word-break](https://www.tutorialrepublic.com/css-reference/css3-word-break-property.php) | Specifies how to break lines within words. |
| [word-spacing](https://www.tutorialrepublic.com/css-reference/css-word-spacing-property.php) | Sets the spacing between words. |
| [word-wrap](https://www.tutorialrepublic.com/css-reference/css3-word-wrap-property.php) | Specifies whether to break words when the content overflows the boundaries of its container. |
| [z-index](https://www.tutorialrepublic.com/css-reference/css-z-index-property.php) | Specifies a layering or stacking order for positioned elements. |

**Values of TYPE attribute in <INPUT> element**

|  |  |  |
| --- | --- | --- |
| **Type** | **Description** | **Basic Examples** |
| [button](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/button) | [A push button with no default behavior displaying the value of the value attribute, empty by default.](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input#attr-value) |  |
| [checkbox](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/checkbox) | A check box allowing single values to be selected/deselected. |  |
| [color](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/color) | A control for specifying a color; opening a color picker when active in supporting browsers. |  |
| [date](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/date) | A control for entering a date (year, month, and day, with no time). Opens a date picker or numeric wheels for year, month, day when active in supporting browsers. |  |
| [datetime-local](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/datetime-local) | A control for entering a date and time, with no time zone. Opens a date picker or numeric wheels for date- and time-components when active in supporting browsers. |  |
| [email](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/email) | A field for editing an email address. Looks like a text input, but has validation parameters and relevant keyboard in supporting browsers and devices with dynamic keyboards. |  |
| [file](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/file) | A control that lets the user select a file. Use the [accept](#attr-accept) attribute to define the types of files that the control can select. |  |
| [hidden](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/hidden) | A control that is not displayed but whose value is submitted to the server. There is an example in the next column, but it's hidden! |  |
| [image](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/image) | A graphical submit button. Displays an image defined by the src attribute. The [alt](#attr-alt) attribute displays if the image [src](#attr-src) is missing. |  |
| [month](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/month) | A control for entering a month and year, with no time zone. |  |
| [number](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/number) | A control for entering a number. Displays a spinner and adds default validation when supported. Displays a numeric keypad in some devices with dynamic keypads. |  |
| [password](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/password) | A single-line text field whose value is obscured. Will alert user if site is not secure. |  |
| [radio](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/radio) | A radio button, allowing a single value to be selected out of multiple choices with the same [name](#attr-name) value. |  |
| [range](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/range) | A control for entering a number whose exact value is not important. Displays as a range widget defaulting to the middle value. Used in conjunction [min](#attr-min) and [max](#attr-max) to define the range of acceptable values. |  |
| [reset](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/reset) | A button that resets the contents of the form to default values. Not recommended. |  |
| [search](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/search) | A single-line text field for entering search strings. Line-breaks are automatically removed from the input value. May include a delete icon in supporting browsers that can be used to clear the field. Displays a search icon instead of enter key on some devices with dynamic keypads. |  |
| [submit](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/submit) | A button that submits the form. |  |
| [tel](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/tel) | A control for entering a telephone number. Displays a telephone keypad in some devices with dynamic keypads. |  |
| [text](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/text) | The default value. A single-line text field. Line-breaks are automatically removed from the input value. |  |
| [time](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/time) | A control for entering a time value with no time zone. |  |
| [url](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/url) | A field for entering a URL. Looks like a text input, but has validation parameters and relevant keyboard in supporting browsers and devices with dynamic keyboards. |  |
| [week](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/week) | A control for entering a date consisting of a week-year number and a week number with no time zone. |  |
| **Obsolete values** | | |
| [datetime](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/datetime) | A control for entering a date and time (hour, minute, second, and fraction of a second) based on UTC time zone. |  |

Popular JavaScript Framework

* Angular
* React
* jQuery
* Vue.js
* Ext.js
* Ember.js
* Meteor
* Mithril
* Node.js
* Polymer
* Aurelia
* Backbone.js

## Applications of Javascript Programming

As mentioned before, **Javascript** is one of the most widely used **programming languages** (Front-end as well as Back-end). It has it's presence in almost every area of software development. I'm going to list few of them here:

* **Client side validation** - This is really important to verify any user input before submitting it to the server and Javascript plays an important role in validting those inputs at front-end itself.
* **Manipulating HTML Pages** - Javascript helps in manipulating HTML page on the fly. This helps in adding and deleting any HTML tag very easily using javascript and modify your HTML to change its look and feel based on different devices and requirements.
* **User Notifications** - You can use Javascript to raise dynamic pop-ups on the webpages to give different types of notifications to your website visitors.
* **Back-end Data Loading** - Javascript provides Ajax library which helps in loading back-end data while you are doing some other processing. This really gives an amazing experience to your website visitors.
* **Presentations** - JavaScript also provides the facility of creating presentations which gives website look and feel. JavaScript provides RevealJS and BespokeJS libraries to build a web-based slide presentations.
* **Server Applications** - Node JS is built on Chrome's Javascript runtime for building fast and scalable network applications. This is an event based library which helps in developing very sophisticated server applications including Web Servers.

This list goes on, there are various areas where millions of software developers are happily using Javascript to develop great websites and others softwares.