

# Design with CSS

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## Abstract

The part three of the tutorial shows that HTML elements determined by `div` and `span` tags occupy the key position in CSS web page design and along with the hyperlink and its pseudo-classes are sufficient for a ballanced web presentation.

**Key Phrases** How to use `div`, how to use `span`, CSS based designs.

**Key Words** Cascading style sheet, CSS, `div`, `span`, page formating.

## Introduction

Three important HTML elements emerge in context of a CSS based web page design: the divider (`div`), the `span`, and the hyperlink (`a`). Indeed, most of the page formatting can be done using the mentioned elements and appropriate CSS properties. This note shows how it actually works.

## `div` and `span` Elements

On its own, the elements `< div > ... < /div >` and `< span > ... < /span >` are rather useless, because they have no effect on a plain HTML formatted text. The two differ only in the feature called the display style. The display style rule admits values: `block`, `inline`, `list-item`, and `none`. By default, the divider has a `block` display and the `span` has an `inline` display. Using the `list-item` display we can design an unordered list and the `none` value lets the element with this feature disappear from the document. This is useful in context of dynamic HTML programming. The luck of any features is the main advantage of `div` and `span`, because we can freely apply to them any class of styles we choose and use them to format

our document. The following code provides some elementary style rules for formatting of a simple web article and how to use them. The properties and their values are self-explanatory.

```
<html>
  <head>
    <style>
      .page{
        margin:20px auto auto auto;
        width:500px;
        font-family:verdana, serif, arial;
        color:DarkSlateGray;
        background-color:White;
      }
      .title{
        margin:40px 40px 30px 30px;
        font-size:18px;
        font-weight:bold;
      }
      .author{
        margin:40px 40px 30px 60px;
        font-size:12px;
        font-style:italic;
      }
      .par{
        margin:10px 40px 10px 30px;
        font-size:12px;
        line-height:24px;
        text-align:justify;
      }
    </style>
```

```
</head>
<body>
  <div class="page">
    <div class="title">Title of the article</div>
    <div class="author">Author: Your name</div>
    <div class="par">
      Your text here
    </div>
  </div>
</body>
</html>
```

## Pseudo-Elements

By now you could notice, that every HTML tag has its counterpart in the CSS language. We write `h1`, `p`, `ul` etc. to modify the appearance of the corresponding HTML tag. Some of these counterparts come wired with further features, called pseudo-elements. For example, the paragraph has pseudo-elements `first-line` and `first-letter`, that can be used to modify appearance of the first-line and first-letter in a paragraph. Pseudo-elements are attached to the tag or selector by a colon, meaning, the selecting construct has form `tag.selector:pseudo-elementproperty:value, . . .`. To magnify the first letter of a paragraph, pull it under the top of the first line and paint the first line blue we write

```
p:first-letter{font-size:200%; color:green; float:left;}
p:first-line{color:green;}
```

If we would like using these rules only in a particular paragraph we can use a class level selector and write

```
p.story:first-letter{font-size:200%; color:green; float:left;}
p.story:first-line{color:green;}
```

The most serious pseudo-element equipped tag is the anchor, or hyperlink. A full modification of the anchor defaults requires new rules in each of the following classes. Interestingly, the order of the classes must be maintained for all the changes to take place.

```
a:link {...}      /* unvisited link */
a:visited {...}   /* visited link */
a:hover {...}     /* mouse over link */
a:active {...}    /* selected link */
```

## References

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