

CSS

Cascading Style Sheets

This is a headline

Here is a paragraph, and some words are going to display **bold** while other words are going to display in *italics*.

- List item
- List item

```
<h1>This is a headline</h1>
```

```
<p>Here is a paragraph, and  
some words are going to display  
<strong>bold</strong> while  
other  
words are going to display in  
<em>italics</em>. </p>
```

```
<ul>  
  <li>List item</li>  
  <li>List item</li>  
</ul>
```

```
<h1>This is a headline</h1>
```

```
<p>Here is a paragraph, and  
some words are going to display  
<strong>bold</strong> while  
other  
words are going to display in  
<em>italics</em>. </p>
```

```
<ul>  
  <li>List item</li>  
  <li>List item</li>  
</ul>
```

```
<h1>This is a headline</h1>
```

```
<p>Here is a paragraph, and  
some words are going to display  
<strong>bold</strong> while  
other  
words are going to display in  
<em>italics</em>. </p>
```

```
<ul>  
  <li>List item</li>  
  <li>List item</li>  
</ul>
```

```
<h1>This is a headline</h1>
```

```
h1{ color: purple; }
```

```
<p>Here is a paragraph, and  
some words are going to display  
<strong>bold</strong> while  
other  
words are going to display in  
<em>italics</em>. </p>
```

```
<ul>  
  <li>List item</li>  
  <li>List item</li>  
</ul>
```

```
<h1>This is a headline</h1>
```

```
h1{ color: purple; }
```

```
<p>Here is a paragraph, and  
some words are going to display  
<strong>bold</strong> while  
other  
words are going to display in  
<em>italics</em>. </p>
```

```
p{  
    font-family: Times;  
    line-height: 10px;  
}
```

```
<ul>  
    <li>List item</li>  
    <li>List item</li>  
</ul>
```

```
<h1>This is a headline</h1>
```

```
h1{ color: purple; }
```

```
<p>Here is a paragraph, and  
some words are going to display  
<strong>bold</strong> while  
other  
words are going to display in  
<em>italics</em>. </p>
```

```
p{  
    font-family: Times;  
    line-height: 10px;  
}
```

```
<ul>  
    <li>List item</li>  
    <li>List item</li>  
</ul>
```

```
ul{  
    border:1px solid #000;  
    margin-top: 20px;  
}
```

This is a headline

Here is a paragraph, and some words are going to display **bold** while other words are going to display in *italics*.

- List item
- List item

```
h1{ color: green; }
```

```
p{  
    font-family: Times;  
    line-height: 10px;  
}
```

```
ul{  
    border:1px solid #000;  
    margin-top: 20px;  
}
```

Three ways to reference HTML tags

1. Referencing the **type** of tag it is
2. Specifying an **id** attribute
3. Specifying an **class** attribute

Three ways to style an HTML page

```
<h1>This is a headline</h1>
```

```
<div id="main-content">text</div>
```

```
<p class="about">Some text</p>
<p class="about">More text</p>
<p class="about">Even more</p>
```

Three ways to style an HTML page

element's type <h1>

```
<h1>This is a headline</h1>
```

```
<div id="main-content">text</div>
```

```
<p class="about">Some text</p>
```

```
<p class="about">More text</p>
```

```
<p class="about">Even more</p>
```

Three ways to style an HTML page

element's type <h1>

```
<h1>This is a headline</h1>
```

element's id

```
<div id="main-content">text</div>
```

```
<p class="about">Some text</p>
<p class="about">More text</p>
<p class="about">Even more</p>
```

Three ways to style an HTML page

element's type <h1>

```
<h1>This is a headline</h1>
```

element's id

```
<div id="main-content">text</div>
```

element's class

```
<p class="about">Some text</p>
<p class="about">More text</p>
<p class="about">Even more</p>
```

<p></p>

```
<p id="a-unique-label"></p>
```

attribute name

⋮

```
<p id="a-unique-label"></p>
```

attribute name

.....
< p id="a-unique-label" ></p>

.....
equals symbol

attribute name value in quotes

.....
.....
< p id="a-unique-label" ></p>
.....
.....

equals symbol

< p > < / p >

```
<p class="multiple-paragraphs"></p>
```

attribute name

⋮

<p class="multiple-paragraphs"></p>

attribute name

⋮

<p class="multiple-paragraphs" ></p>

⋮

equals symbol

attribute name

value in quotes

< p class = "multiple-paragraphs" ></p>

equals symbol

ID

Every **id** has to be unique, and individually identify a specific tag on your page (no duplicates).

CLASS

Classes are groupings, and can be applied to multiple tags. Use them over and over, even on different tags.

How do we refer to these?

1. Referencing the **type** of tag it is

```
h1, p, article, nav
```

2. Specifying an **id** attribute

```
#my-unique-id
```

3. Specifying an **class** attribute

```
.multiple-items
```

What are the three ways to reference content in my HTML, so that I can style it with CSS?

What are the three ways to reference content in my HTML, so that I can style it with CSS?

TYPE (like the tag name, h1, p, or article)

ID attribute

CLASS attribute

How do I give an HTML tag an id?

How do I give an HTML tag an id?

Specify an id attribute

```
<p id="some-id"> ... </p>
```

How do I give an HTML tag a class?

How do I give an HTML tag a class?

Specify an class attribute

```
<p class="some-class-name"> ... </p>
```

What's the difference
between an id and a class?

What's the difference between an id and a class?

IDs are unique

Classes are groupings, which can
be used over and over

What symbol do we use in CSS
to reference an id?

What symbol do we use in CSS to reference an id?

the pound sign #

What symbol do we use in
CSS to reference a class?

What symbol do we use in
CSS to reference a class?

a period .

Let's write some CSS

Where do I put CSS?

<head>

</head>

<body>

</body>

Where do I put CSS?

<head>

```
<style>  
    ...  
</style>
```



</head>
<body>

</body>

The Style Tag

<style>

Parts of a CSS rule

```
h2 {  
    color: black;  
}
```

Parts of a CSS rule

```
h2{
```

```
    color: black;
```

```
}
```

selector

Parts of a CSS rule

h2 {

color: black;

}

curly brackets

Parts of a CSS rule

```
h2 {  
    color: black;  
}
```

property

Parts of a CSS rule

```
h2 {  
    color: black;  
}
```

value

Parts of a CSS rule

```
h2 {  
    color: black;  
}
```

separated by a colon

Parts of a CSS rule

```
h2 {  
    color: black;  
}
```

End each line with a semicolon

Parts of a CSS rule

```
h2{  
    color: black;  
}
```

start with selector

Three Kinds of Selectors

Three Kinds of Selectors

TYPE SELECTORS

div

p

h2

strong

Three Kinds of Selectors

TYPE SELECTORS

div

p

h2

strong

CLASS SELECTORS

.headlines

.paragraphs

.bylines

.summary

Three Kinds of Selectors

TYPE SELECTORS

div

p

h2

strong

CLASS SELECTORS

.headlines

.paragraphs

.bylines

.summary

ID SELECTORS

#main

#first-article

#footer

#sidebar

Three Kinds of Selectors

TYPE SELECTORS

div

p

h2

strong

CLASS SELECTORS

.headlines

.paragraphs

.bylines

.summary



ID SELECTORS

#main

#first-article

#footer

#sidebar



Type (name) Selectors

```
p {
```

```
  font-family: Helvetica;
```

```
}
```

```
<body>
```

```
  <p id="first">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
  <p>Lorem ipsum dolor sit amet, consectetur  
  adipisicing elit, sed do eiusmod tempor incididunt ut  
  labore et dolore magna aliqua.</p>
```

```
  <p class="quote">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
  <p class="quote">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

Type (name) Selectors

```
p {
```

font-family: Helvetica;

```
}
```

```
<body>
```

```
<p id="first">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
<p>Lorem ipsum dolor sit amet, consectetur  
adipisicing elit, sed do eiusmod tempor incididunt ut  
labore et dolore magna aliqua.</p>
```

```
<p class="quote">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
<p class="quote">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

Type Selectors

```
p {
```

```
  font-family: Helvetica;
```

```
}
```

```
<body>
```

```
  <p id="first">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

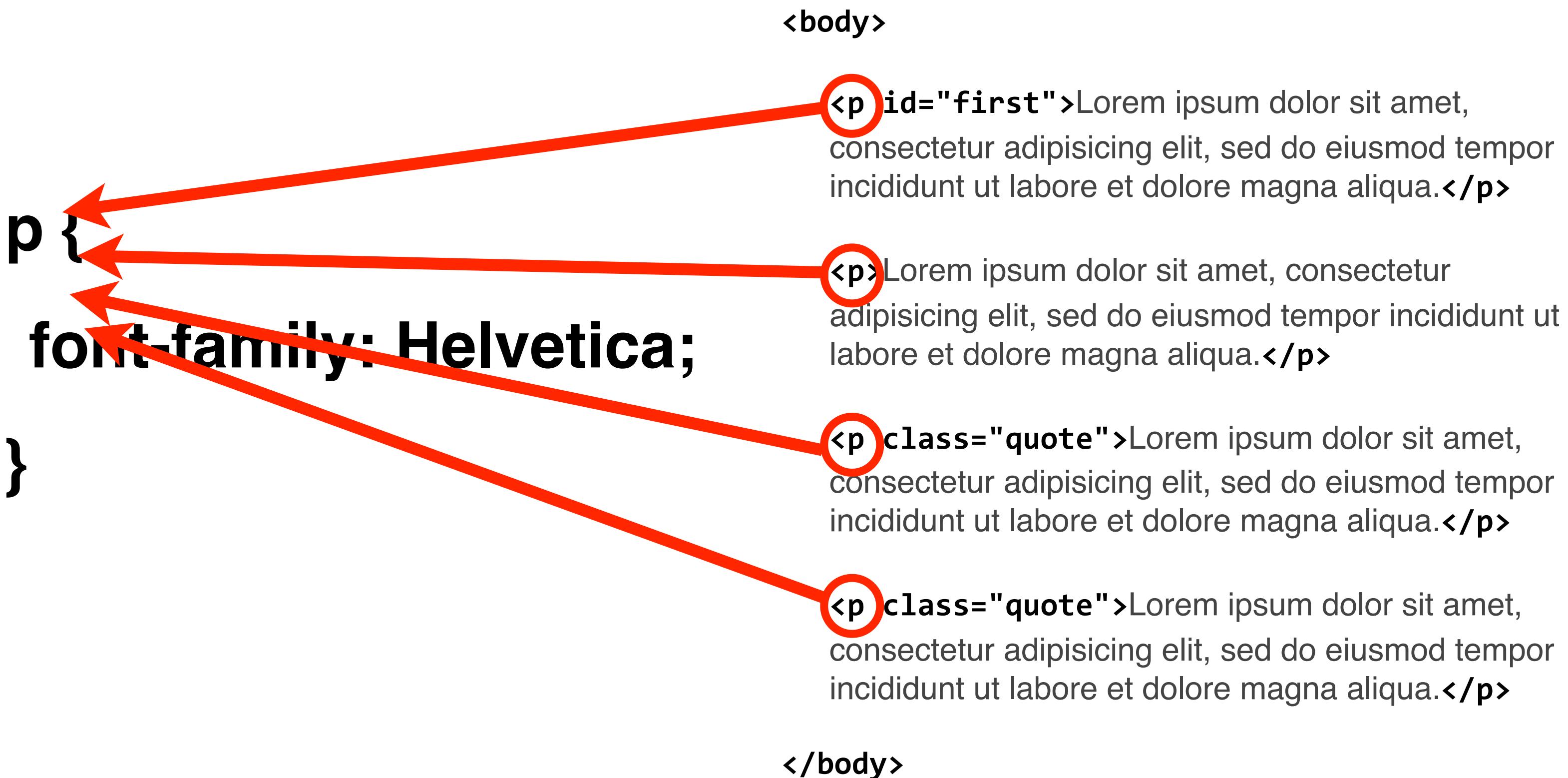
```
  <p>Lorem ipsum dolor sit amet, consectetur  
  adipisicing elit, sed do eiusmod tempor incididunt ut  
  labore et dolore magna aliqua.</p>
```

```
  <p class="quote">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
  <p class="quote">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

Type Selectors



Class Selectors

```
.quote {  
    font-family: Helvetica;  
}
```

```
<body>
```

```
<p id="first">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
<p>Lorem ipsum dolor sit amet, consectetur  
adipisicing elit, sed do eiusmod tempor incididunt ut  
labore et dolore magna aliqua.</p>
```

```
<p class="quote">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
<p class="quote">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

Class Selectors

```
.quote {  
    font-family: Helvetica;  
}
```

```
<body>
```

```
<p id="first">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
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<p>Lorem ipsum dolor sit amet, consectetur  
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labore et dolore magna aliqua.</p>
```

```
<p class="quote">Lorem ipsum dolor sit amet,  
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consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

Class Selectors

```
.quote {  
    font-family: Helvetica;  
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```

```
<body>
```

```
<p id="first">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
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<p class="quote">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

Class Selectors

```
.quote {  
    font-family: Helvetica;  
}
```

<body>

<p id="first">Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>

<p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>

<p class="quote">Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>

<p class="quote">Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>

</body>

ID Selector

```
#first {
```

```
  font-family: Helvetica;
```

```
}
```

```
<body>
```

```
  <p id="first">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
  <p>Lorem ipsum dolor sit amet, consectetur  
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  labore et dolore magna aliqua.</p>
```

```
  <p class="quote">Lorem ipsum dolor sit amet,  
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```

```
  <p class="quote">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

ID Selector

```
#first {
```

```
font-family: Helvetica;
```

```
}
```

```
<body>
```

```
<p id="first">Lorem ipsum dolor sit amet,  
consectetur adipisicing elit, sed do eiusmod tempor  
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<p class="quote">Lorem ipsum dolor sit amet,  
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```

```
</body>
```

ID Selector

```
#first {
```

```
  font-family: Helvetica;
```

```
}
```

```
<body>
```

```
  <p id="first">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
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  adipisicing elit, sed do eiusmod tempor incididunt ut  
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  incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```

ID Selector

```
#first {
```

```
  font-family: Helvetica;
```

```
}
```

```
<body>
```

```
  <p id="first">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
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  <p class="quote">Lorem ipsum dolor sit amet,  
  consectetur adipisicing elit, sed do eiusmod tempor  
  incididunt ut labore et dolore magna aliqua.</p>
```

```
</body>
```



IDs vs Class

IDs vs Classes

IDs

- IDs are unique. Every HTML element with an ID needs to be unique.
- IDs are represented by a pound symbol (#)

Classes

- Classes can be reused as groupings. Multiple HTML tags can have the same class.
- Classes are represented by a period (.)

Pop Quiz

What's the difference
between HTML and CSS?

What's the difference between HTML and CSS?

HTML is content structure
CSS is the design, how it looks

What are the three ways to reference an HTML tag?

What are the three ways to reference an HTML tag?

1. the **TYPE** of the tag `<p>`
2. using the tag's **ID** attribute
3. using a tag's **CLASS** attribute

What symbol is used to denote an ID?

What symbol is used to denote an ID?

the pound symbol #

What symbol is used to denote a class?

What symbol is used to denote a class?

a period .

Properties

How to change the color of text

color: brown;

COLOR NAMES

147 predefined
names

DarkCyan

Purple

Black

Red

RGB VALUES

Values for red,
green and blue

```
rgb(100,100,90);  
rgb(255,255,255);  
rgb(0,0,0);  
rgb(30,44,200);
```

Hexadecimal

Six or three digit
alpha-numeral.

```
#FFFFFF;  
#000000;  
#000;  
#AF0;
```

How to change the color of text

color: brown;

COLOR NAMES

147 predefined
names

DarkCyan

Purple

Black

Red

RGB VALUES

Values for red,
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```
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DarkCyan
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RGB VALUES

Values for red,
green and blue

rgb(100,100,90);
rgb(255,255,255);
rgb(0,0,0);
rgb(30,44,200);

Hexadecimal

Six or three digit
alpha-numeral.

#FFFFFF;
#000000;
#000;
#AF0;

Backgrounds

background-color: blue;

background-image: url(image.jpg);

Font Family

`font-family: "Times New Roman", Times, serif;`

FALL BACK

A comma separated list of fonts to use if the system doesn't have the font installed.

QUOTES

Use quotes when a font is multiple words, like “Times New Roman.”

END WITH GENERIC

End with a generic font, like serif or san-serif. This way the browser will pick for you.

Font Family

`font-family: "Times New Roman", Times, serif;`

FALL BACK

A comma separated list of fonts to use if the system doesn't have the font installed.

QUOTES

Use quotes when a font is multiple words, like “Times New Roman.”

END WITH GENERIC

End with a generic font, like serif or san-serif. This way the browser will pick for you.

Font Family

```
font-family: "Times New Roman", Times, serif;
```

FALL BACK

A comma separated list of fonts to use if the system doesn't have the font installed.

QUOTES

Use quotes when a font is multiple words, like “Times New Roman.”

END WITH GENERIC

End with a generic font, like serif or san-serif. This way the browser will pick for you.

Font Family

```
font-family: "Times New Roman", Times, serif;
```

FALL BACK

A comma separated list of fonts to use if the system doesn't have the font installed.

QUOTES

Use quotes when a font is multiple words, like “Times New Roman.”

END WITH GENERIC

End with a generic font, like serif or san-serif. This way the browser will pick for you.

Font Size

```
font-size: 12px;
```

PIXELS

Pixels are considered a fixed font size. Fonts will appear at this size relative to the screen size.

PERCENTAGES

Percentages are relative from the default size of the text. 100% means the default size.

EM

EM is another way of doing relative measurement. Varies only slightly from %.

Font Size

```
font-size: 12px;
```

PIXELS

Pixels are considered a fixed font size. Fonts will appear at this size relative to the screen size.

PERCENTAGES

Percentages are relative from the default size of the text. 100% means the default size.

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Font Size

`font-size: 12px;`

PIXELS

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Font Size

```
font-size: 12px;
```

PIXELS

Pixels are considered a fixed font size. Fonts will appear at this size relative to the screen size.

PERCENTAGES

Percentages are relative from the default size of the text. 100% means the default size.

EM

EM is another way of doing relative measurement. Varies only slightly from %.

Others

font-weight: normal;

font-weight: bold;

text-align: left;

text-align: right;

text-align: center;

text-transform: uppercase;

text-transform: lowercase;

text-transform: capitalize;

Links

a:link
a:visited
a:hover
a:active

a:link

Before a user
clicks on a link.

a:visited

After a user clicks
on a link.

a:hover

When a user
hovers over a
link.

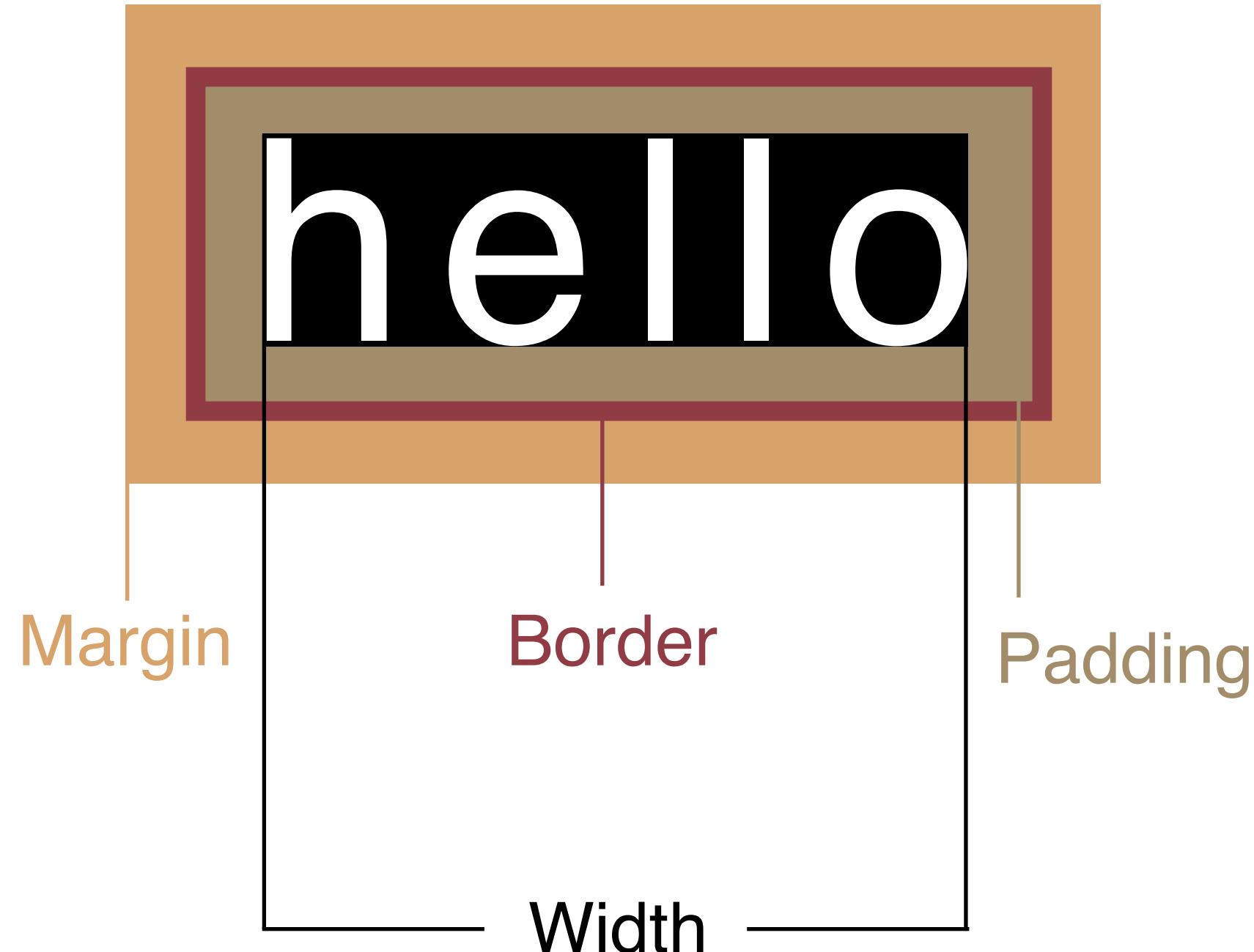
a:active

When the user
clicks down on a
link.

Border, Margin and Padding

```
margin-top: 10px;  
margin-right: 10px;  
margin-bottom: 10px;  
margin-left: 10px;
```

```
margin:10px;
```



borders

border-color
border-width

border-style

solid
dotted
dashed
groove

...

Single sides

border-top-color:#ffffff;
border-left-width: 20px;

Combined

border: 1px solid black;

:

thickness

:

style

:

color

Pop Quiz

What property do I use to change the color of text?

What property do I use to change the color of text?

color : brown;



Why are there several words
when I specify a font-family?

Why are there several words when I specify a font-family?

```
font-family: Helvetica, Arial, sans-serif;
```

Each word is creating a **fallback** in case the user doesn't have a font installed on their system.

What's the difference
between padding and
margins?

What's the difference between padding and margins?

Padding is space between content and
the border

Margin is space between the element
and things around it

What are the three properties
I need to specify for a
border?

What are the three properties
I need to specify for a
border?

a border needs a
thickness, style and color

border: 1px solid black;

Exercise

make the Hello text purple

```
<h2>Hello</h2>
```

Hello

```
h2{  
    color: purple;  
}
```

make the second line of text red

```
<p> It is important to: </p>
<p id="warning"> Listen </p>
```

It is important to:
Listen

```
#warning{  
    color: red;  
}
```

make the list text blue

```
<p> Life Goals: </p>
<p class="items"> Be happy </p>
<p class="items"> Be healthy </p>
<p class="items"> Learn CSS </p>
```

Life Goals
Be happy
Be healthy
Learn CSS

```
.items{  
    color: blue;  
}
```

make a 1 pixel solid
border around this text

```
<div> Hello World </div>
```

Hello World

```
div{  
    border: 1px solid black;  
}
```

Now, add 10 pixels of padding

```
<div> Hello World </div>
```



Hello World

```
div{  
border: 1px solid black;  
padding: 10px;  
}
```

Uh oh, two <div> tags. Only add border/padding to top one.

```
<div id="top"> Hello World </div>
<div id="bottom"> Hello World </div>
```



Hello World

```
#top{  
    border: 1px solid black;  
    padding: 10px;  
}
```

Now make the background orange

```
<div id="top"> Hello World </div>
<div id="bottom"> Hello World </div>
```



Hello World

Hello World

```
#top{  
border: 1px solid black;  
padding: 10px;  
background-color: orange;  
}
```

Change up the font to Times

```
<h1> Welcome to Web Skills </h1>
```

Welcome to Web Skills

Change the size to 36 pixels.

```
<h1> Welcome to Web Skills </h1>
```

Welcome to Web Skills

Now make the font bold.

```
<h1> Welcome to Web Skills </h1>
```

Welcome to Web Skills

```
h1{  
    font-family:Times, serif;  
    font-size: 36px;  
    font-weight: bold;  
}
```