

Tutorial 3

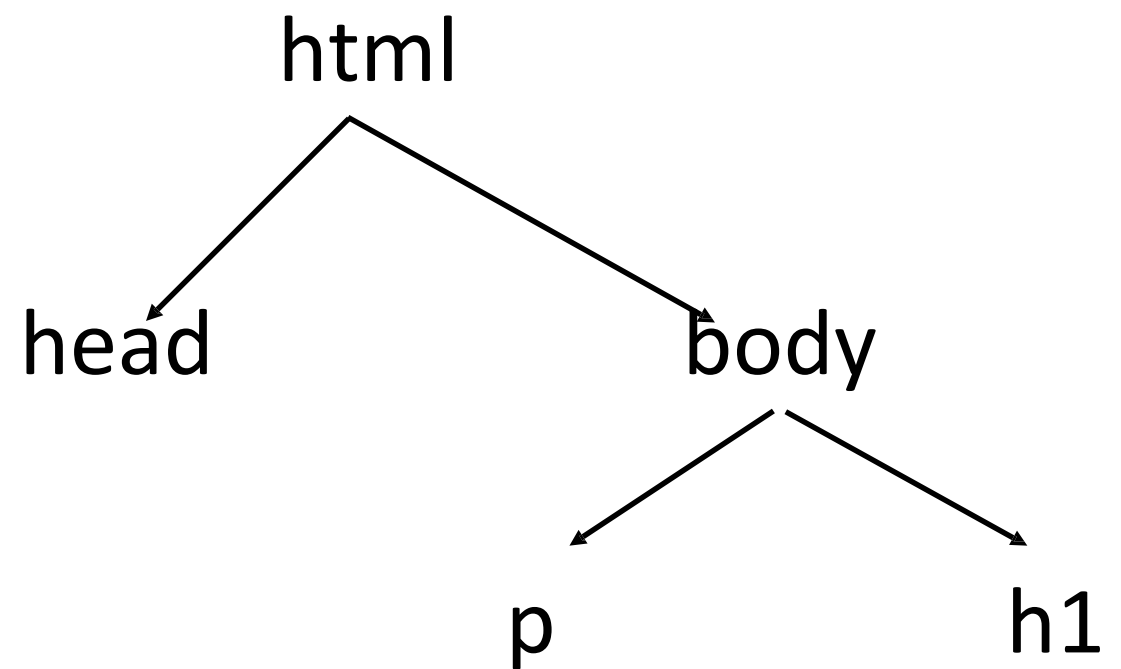
Introduction to CSS

Part 2

SOEN 287

```
<!Doctype html>
<html>
<head>....</head>
<body>
<p>...</p>
<h1>...</h1>
</body>
</html>
```

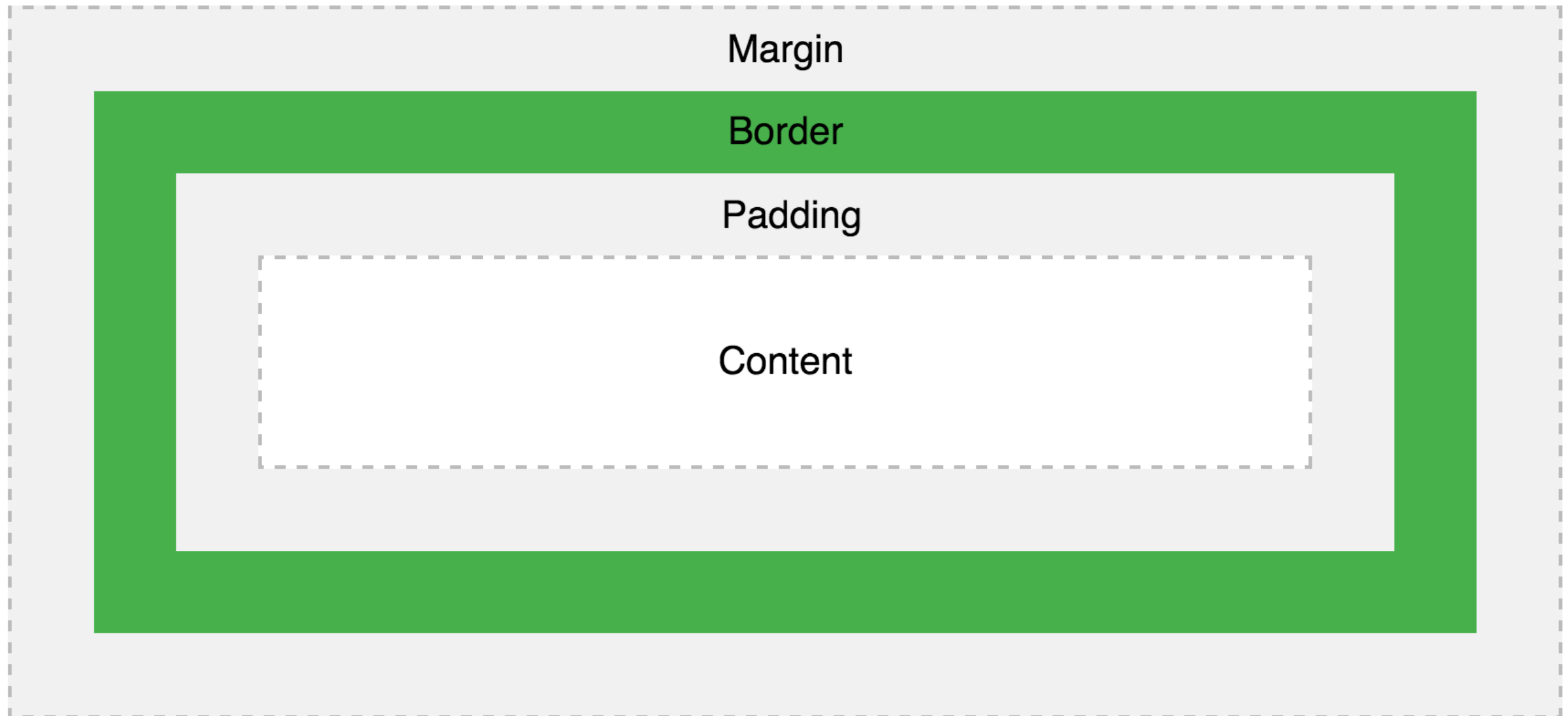
HTML document



(DOM Tree)

Document-Object-Tree model
(for the html code on left)

Box Model in CSS



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

Frequently used patterns for selector Table

Selector	Example	Example description
<u>.class</u>	.intro	Selects all elements with class="intro"
<u>#id</u>	#firstname	Selects the element with id="firstname"
<u>*</u>	*	Selects all elements
<u>element</u>	p	Selects all <p> elements
<u>element,element</u>	div, p	Selects all <div> elements and all <p> elements
<u>element element</u>	div p	Selects all <p> elements inside <div> elements
<u>element>element</u>	div > p	Selects all <p> elements where the parent is a <div> element
<u>:focus</u>	input:focus	Selects the input element which has focus
<u>:hover</u>	a:hover	Selects links on mouse over

Very Good link :<https://webdesignfromscratch.com/html-css/css-inheritance-cascade/>

1. Styles can be inherited from a parent

Some styles, like font family, text-alignment etc., are automatically inherited by child elements from their parent element (i.e. by an element contained inside another one).

Others are not automatically inherited.

Example

```
<div style="font-family:serif; border:1px solid red; padding:10px;">
```

This text will be in a serif font.

```
<p>
```

This text is also in a serif font, because font is inherited by default.

But the border and padding properties are not inherited from the parent div.

```
</p>
```

```
</div>
```

However, you can **make** an element inherit styles from its parent.

Example

```
<div style="font-family:serif; border:1px solid red; padding:10px;">
```

This text will be in a serif font.

```
<p style="border:inherit;">
```

Now the paragraph also has a red border.

Border properties are not inherited by children, by default, but because I set border to “inherit”, it is.

```
</p>
```

```
</div>
```


2. Later styles over-rule earlier styles

If you define a style property, and later define an alternative style property for the same thing, the later definition over-rules the earlier one.

This also applies when you have a combination of external stylesheets, on-page styles, and inline styles.

All other things being equal, the styles that are defined **latest**, i.e. written nearest to the actual HTML elements and read by the browser last, will over-rule earlier definitions.

Example

```
<style type="text/css">
body {
background-color:yellow;
font-weight:bold;
}
div {
background-color:#afa;
font-weight:normal;
}
</style><body>
```

```
<p>Some text here, inherits properties of the body.</p>
```

```
<div>
```

```
<p>However, the div's rules over-ride the body's rules, as the div's rules
apply later (i.e. nearer to this text in the document).</p>
```

```
</div>
```

```
</body>
```


Float in CSS

The float property specifies whether or not a box (an element) should float.

Note: Absolutely positioned elements ignores the float property!

Value	Description
none	The element is not floated, and will be displayed just where it occurs in the text. This is default
left	The element floats to the left
right	The element floats the right
initial	Sets this property to its default value. <u>Read about <i>initial</i></u>
inherit	Inherits this property from its parent element. <u>Read about <i>inherit</i></u>

CSS Pseudo-Classes

Pseudo-classes are CSS classes used to add effects to certain elements. They are used most often to style the anchor elements `<a>` of hyperlinks. Example:

```
a:link { color: blue; text-decoration: underlined; }
```

Can also be written without the `a` (anchor) element:

```
:link { color: blue; text-decoration: underlined; }
```

CSS Pseudo-Classes

There are four pseudo-class elements provided to make rollover and on-click effects possible:

```
a:link { color: blue; text-decoration: underlined; }
```

link not yet visited

```
a:visited { color: green; text-decoration: underlined; }
```

visited link

```
a:hover { color: red; text-decoration: none; }
```

effect on the link when the mouse hovers over it

```
a:active { color: purple; text-decoration: none; }
```

effect on the link when the mouse button is pressed down on it

Note that pseudo-classes for rollover effects must be written in this order in a CSS file for them to work correctly.