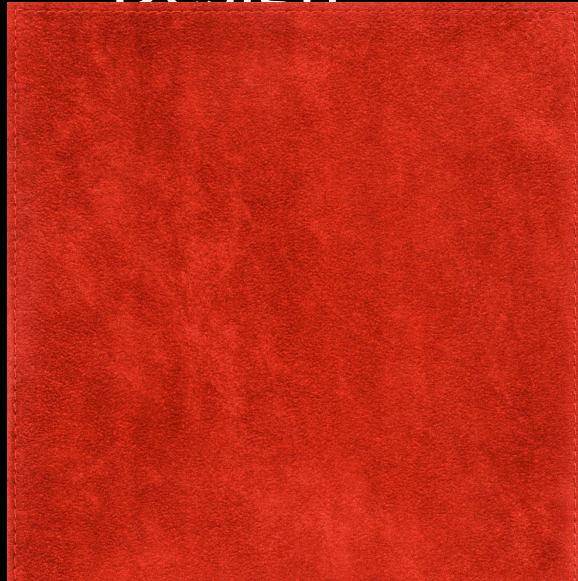


Gunnar Bittersmann @g16n



Design



Design
is not
veneer.

—Aral Balkan

Most people make the mistake of thinking design is what it looks like.
That's not what we think design is. It's not just what it looks like and
feels like. Design is how it works.

—Steve Jobs

[Design] is about worrying about the right thing:
solving your user's problems not your own problems.

—Aral Balkan

Most UX pitfalls would be prevented if developers thought ‘What is the user trying to do’ instead of ‘What info do I have to present’.

—Lea Verou

Design is as much about asking the right questions
as it is about answering them.

—Aral Balkan

Design is much more about saying 'no'
than it is about saying 'yes'.

—Aral Balkan

Perfection is achieved, not when there is nothing more to add,
but when there is nothing left to take away.

—Antoine de Saint-Exupéry

Design isn't crafting a beautiful, textured button.
It's figuring out if there's a way to get rid of the
button altogether.

—Edward Tufte

Great design is invisible, bad design gets noticed.

—Jared Spool

The enemy of good design is rarely bad design;
more often, it is politics, territorialism, and poor
understanding of the problem at hand.

—Dave Cronin

When you know the answer to a problem immediately
it's called production, not design.

—Peter van Blokland

Design is a process, not a product.

—Aral Balkan

The details are not details, they make the product.

—Charles Eames

I remain amazed and perplexed at how often people think they can solve an information architecture problem with interaction design.

—Jesse James Garrett

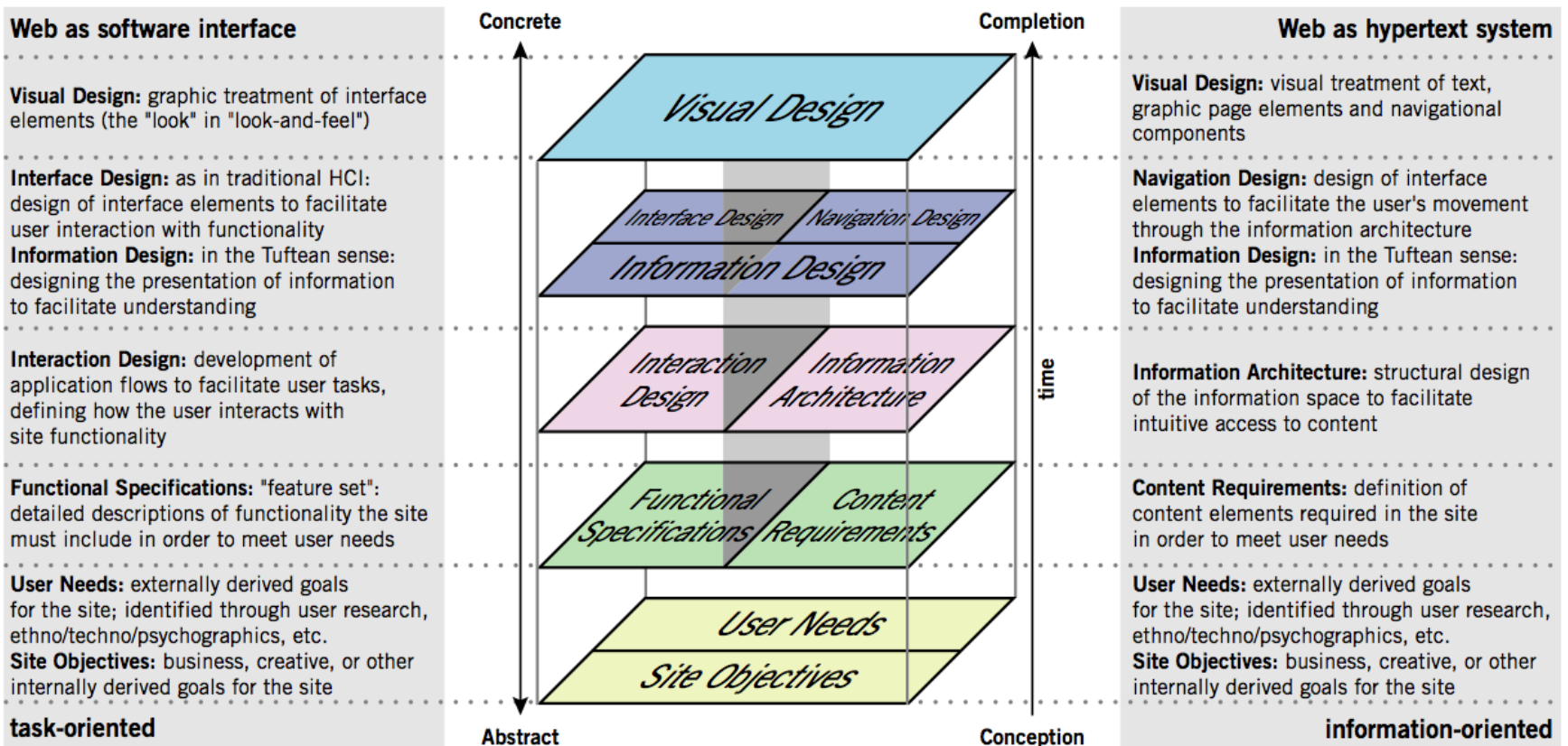
The Elements of User Experience

Jesse James Garrett

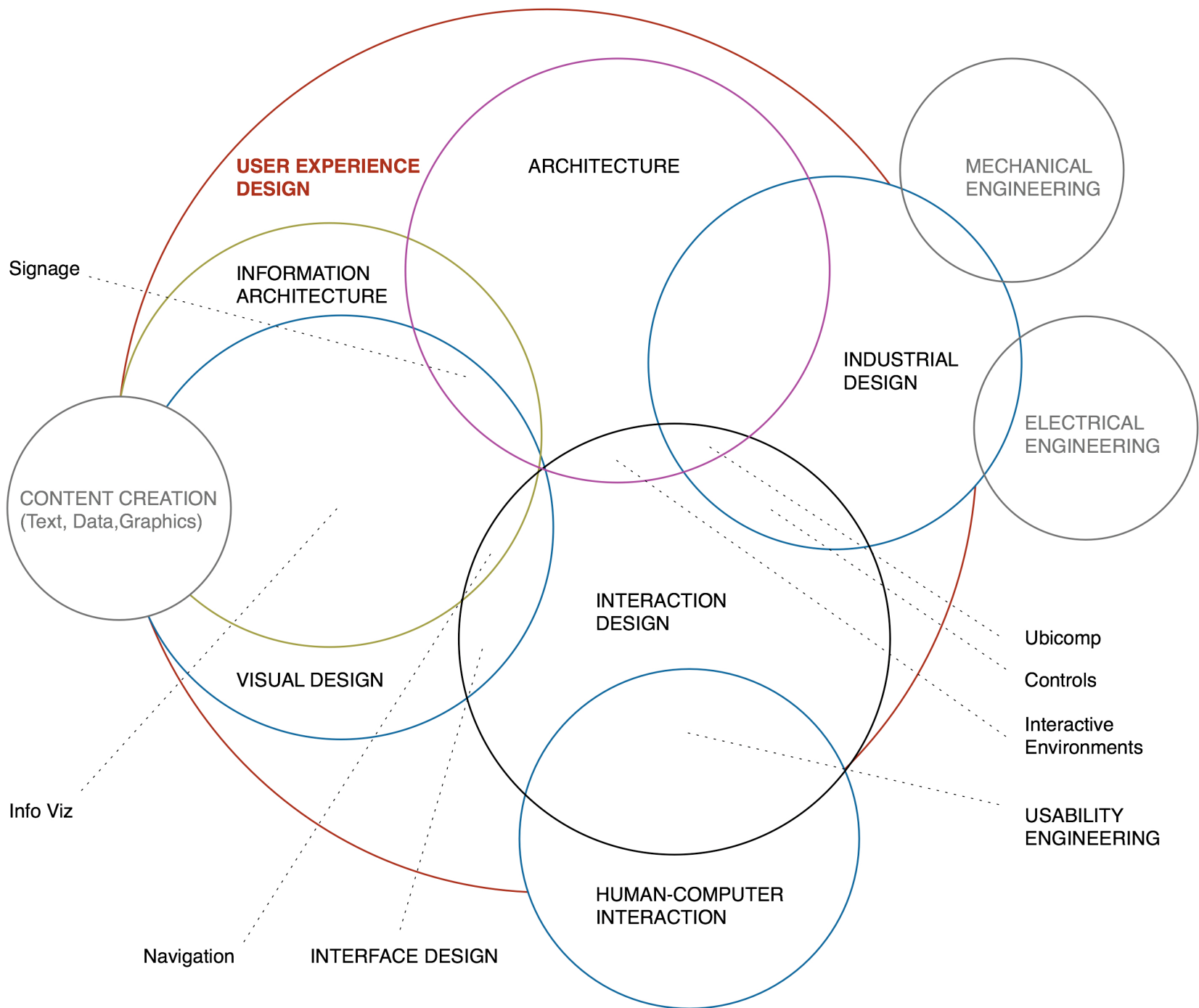
jig@jig.net

30 March 2000

A basic duality: The Web was originally conceived as a hypertextual information space; but the development of increasingly sophisticated front- and back-end technologies has fostered its use as a remote software interface. This dual nature has led to much confusion, as user experience practitioners have attempted to adapt their terminology to cases beyond the scope of its original application. The goal of this document is to define some of these terms within their appropriate contexts, and to clarify the underlying relationships among these various elements.



This picture is incomplete: The model outlined here does not account for secondary considerations (such as those arising during technical or content development) that may influence decisions during user experience development. Also, this model does not describe a development process, nor does it define roles within a user experience development team. Rather, it seeks to define the key considerations that go into the development of user experience on the Web today.



usability

the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.

[ISO 9241-11]

ISO 9241-110

dialog principles

suitability for the task

self descriptiveness

suitability for learning

controllability

conformity with user expectations

suitability for individualization

error tolerance

suitability for the task

webpage (images) optimized for performance

contact information on a website

no required input field irrelevant to the task

autofocus on input field that needs correction

shortcuts to most important pages

self descriptiveness

feedback messages

meaningful link titles

item numbers in paged lists

online help

suitability for learning

suitable metaphors

guided tour

sitemap

controllability

scrollbar

sortable table

halt download and continue later

conformity with
user expectations

logo on top left links to home page

tab key moves cursor to next input field

enter key submits form

consistent vocabulary, eg. “cart”

underlined phrases are always links

suitability for

individualisation

user profile

language negotiation

error tolerance

form validation

error messages in the language of the user

undo function

accessibility



the degree to which a product, device, service, or environment is available to as many people as possible.

do websites need to look exactly the same in every browser?

do websites need to look exactly the same in every browser .com



Brad Frost

@brad_frost



Folge ich

The phrase "pixel-perfect" means nothing to me as neither "pixels" nor "perfect" are in my vocabulary anymore.

Übersetzung anzeigen

Antworten Retweeten Favorisieren Mehr

60

RETWEETS

31

FAVORITEN



20:20 - 21. Nov. 2012

progressive enhancement

is an escalator
that becomes stairs.



graceful degradation

is building a lift
then having to add stairs.

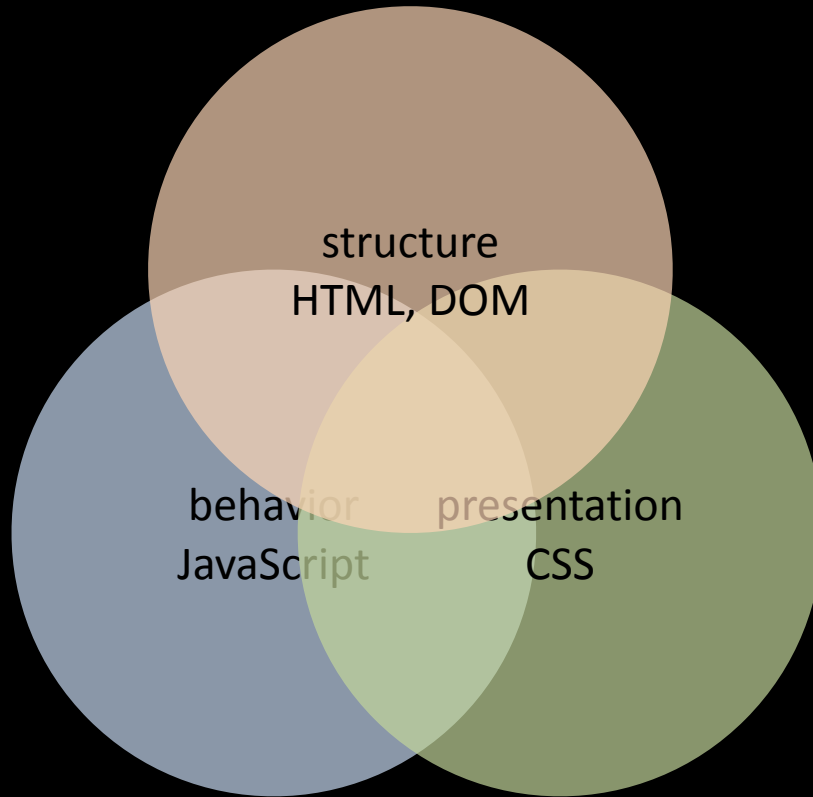
— Andrew Wight

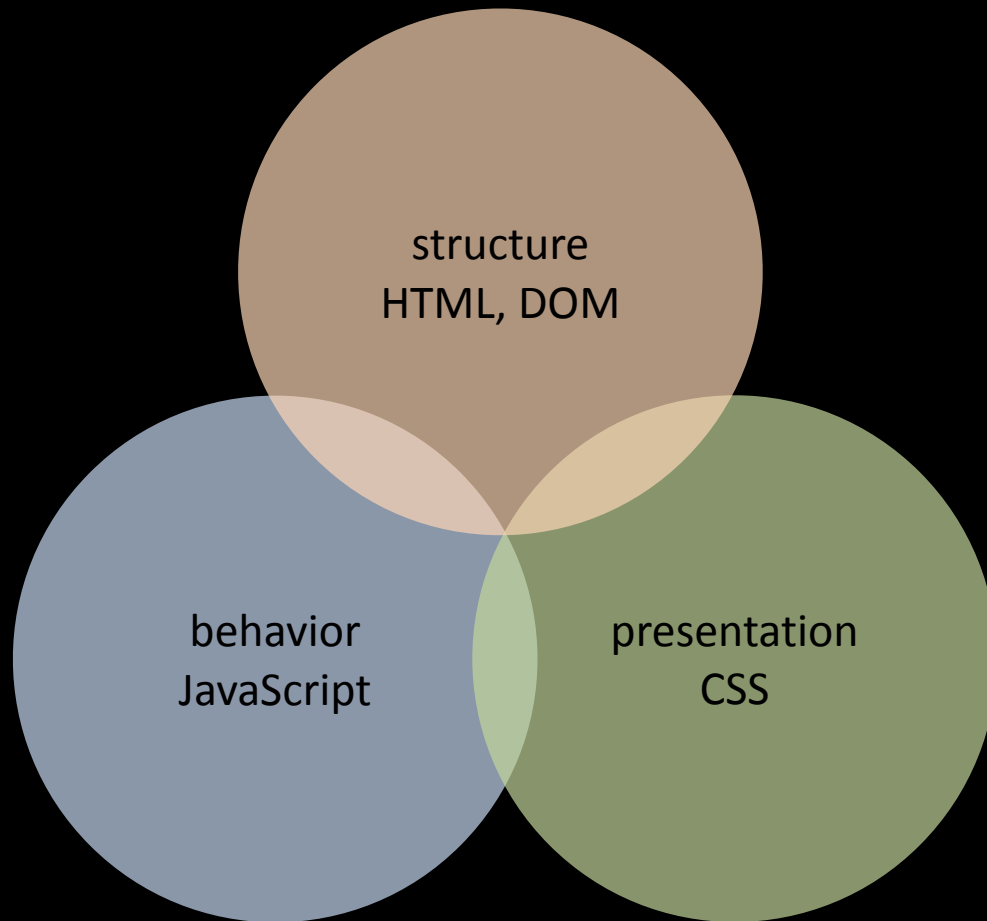


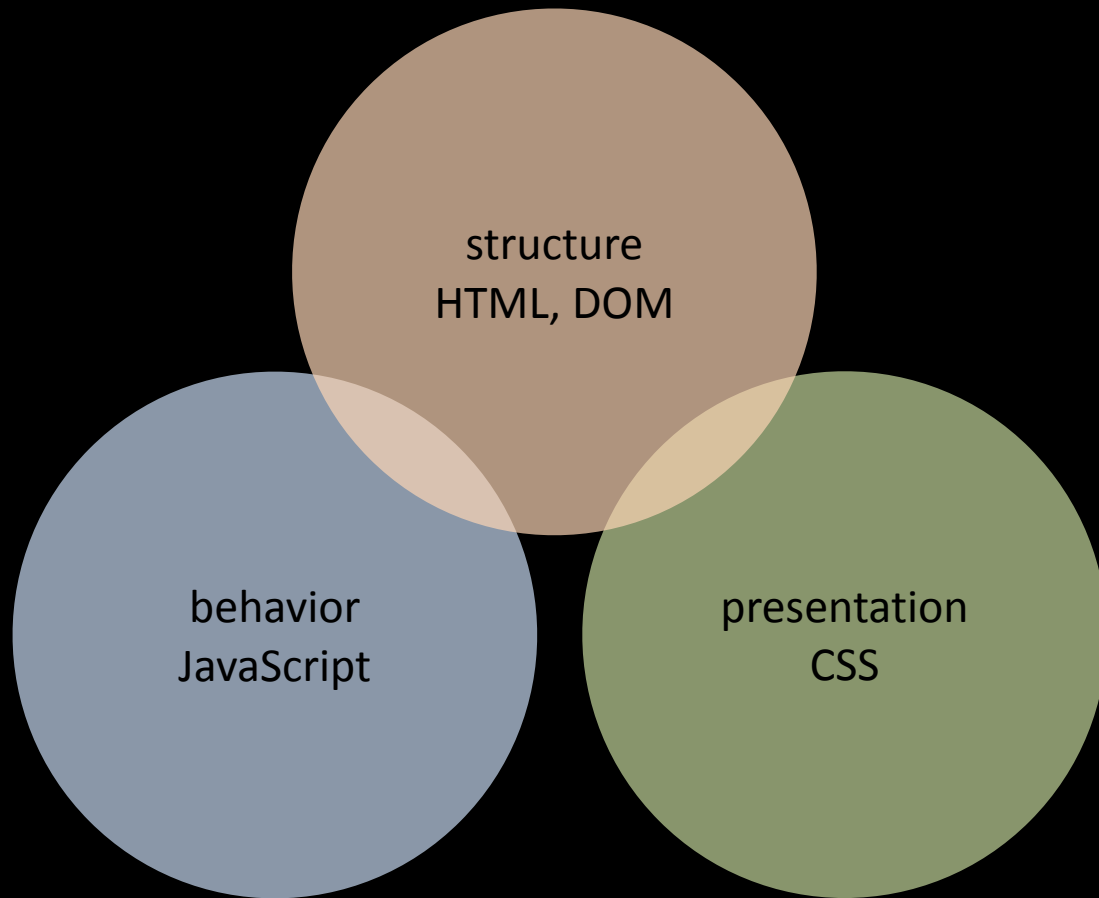
I like an escalator because
an escalator can never break,
it can only become stairs.
There would never be an
escalator temporarily out of
order sign, only an escalator
temporarily stairs.
Sorry for the convenience.

— Mitch Hedberg









HTML

Hypertext Markup Language

element

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

tag

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

element content

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

element content

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

tag

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

start tag

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

tag name
element type

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

end tag

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

tag pairs

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

nested elements

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

wrong!

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

child element
descendant

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

parent element
ancestor

<p>This paragraph
introduces the terms
element, tag and
attribute.</p>

start tag

```
<p id="terms">This paragraph  
introduces the terms  
<b>element</b>, <b>tag</b> and  
<b>attribute</b>.</p>
```

attribute

```
<p id="terms">This paragraph  
introduces the terms  
<b>element</b>, <b>tag</b> and  
<b>attribute</b>.</p>
```

attribute name

```
<p id="terms">This paragraph  
  introduces the terms  
  <b>element</b>, <b>tag</b> and  
  <b>attribute</b>.</p>
```

attribute value

```
<p id="terms">This paragraph  
introduces the terms  
<b>element</b>, <b>tag</b> and  
<b>attribute</b>.</p>
```

attributes

```
<p id="terms" class="lede">This paragraph  
introduces the terms  
<b>element</b>, <b>tag</b> and  
<b>attribute</b>.</p>
```

wrong!

```
<p id="terms" class="lede" class="important">This paragraph  
introduces the terms  
<b>element</b>, <b>tag</b> and  
<b>attribute</b>.</p>
```


multiple classes

```
<p id="terms" class="lede important">This paragraph  
introduces the terms  
<b>element</b>, <b>tag</b> and  
<b>attribute</b>.</p>
```

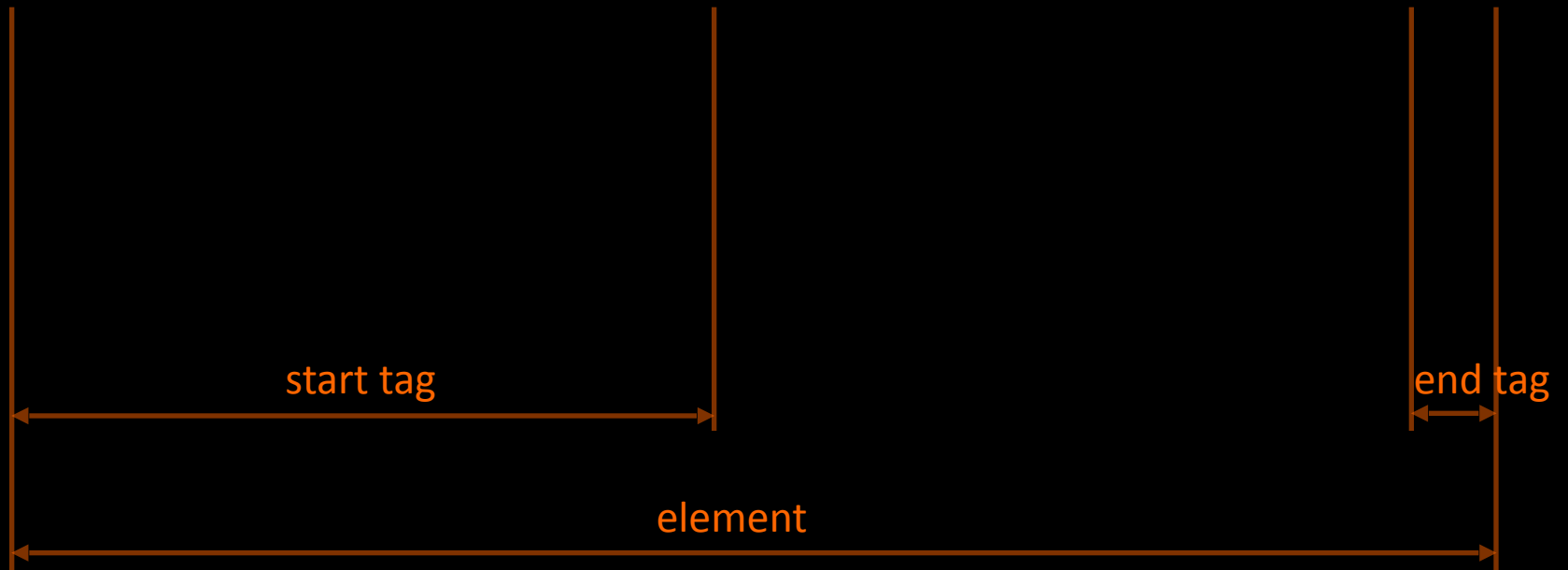
`<p id="terms" class="lede important">This paragraph introduces the terms...</p>`



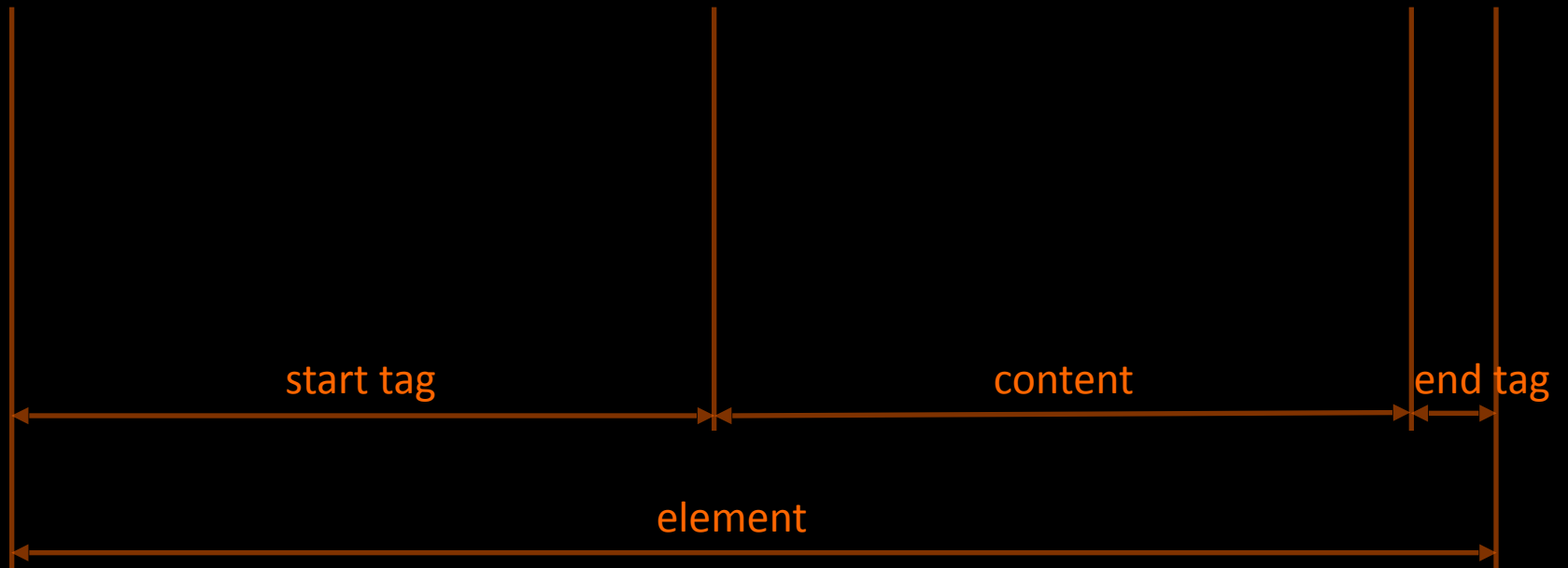
A diagram illustrating the structure of an HTML element. It features a large, empty rectangular box with a thin blue border. The box is positioned below the HTML code snippet. A horizontal blue double-headed arrow is located at the bottom of the box, spanning its entire width. The word "element" is written in blue text, centered below the arrow.

element

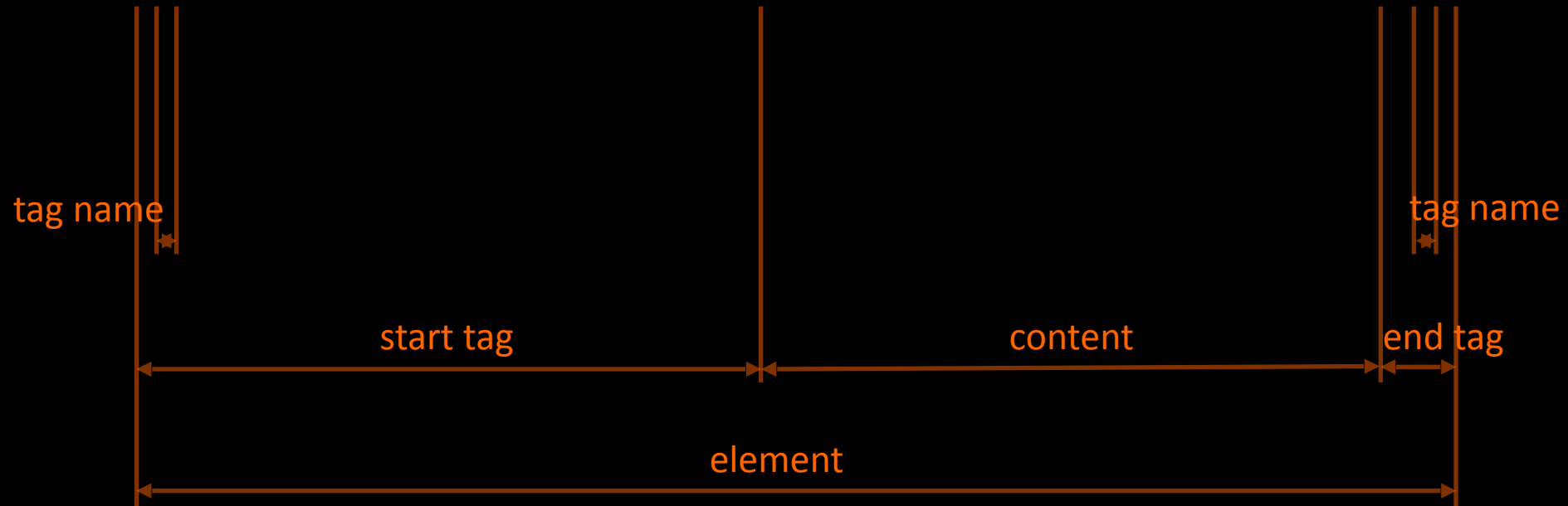
<p id="terms" class="lede important">This paragraph introduces the terms...</p>



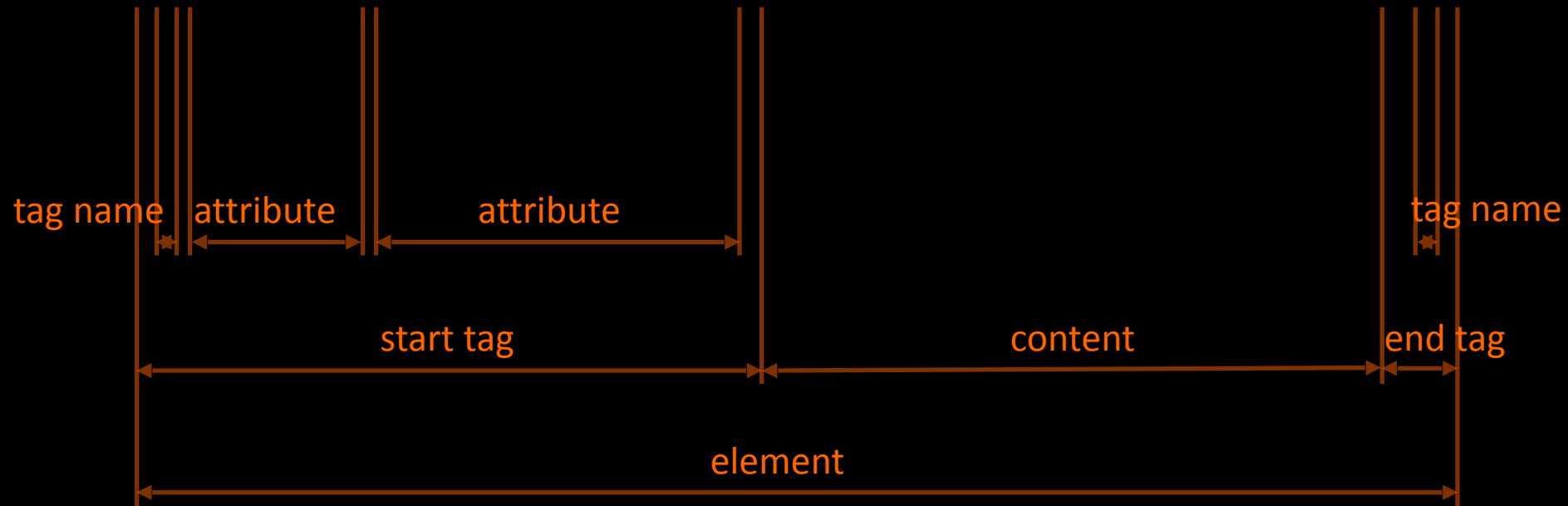
`<p id="terms" class="lede important">This paragraph introduces the terms...</p>`



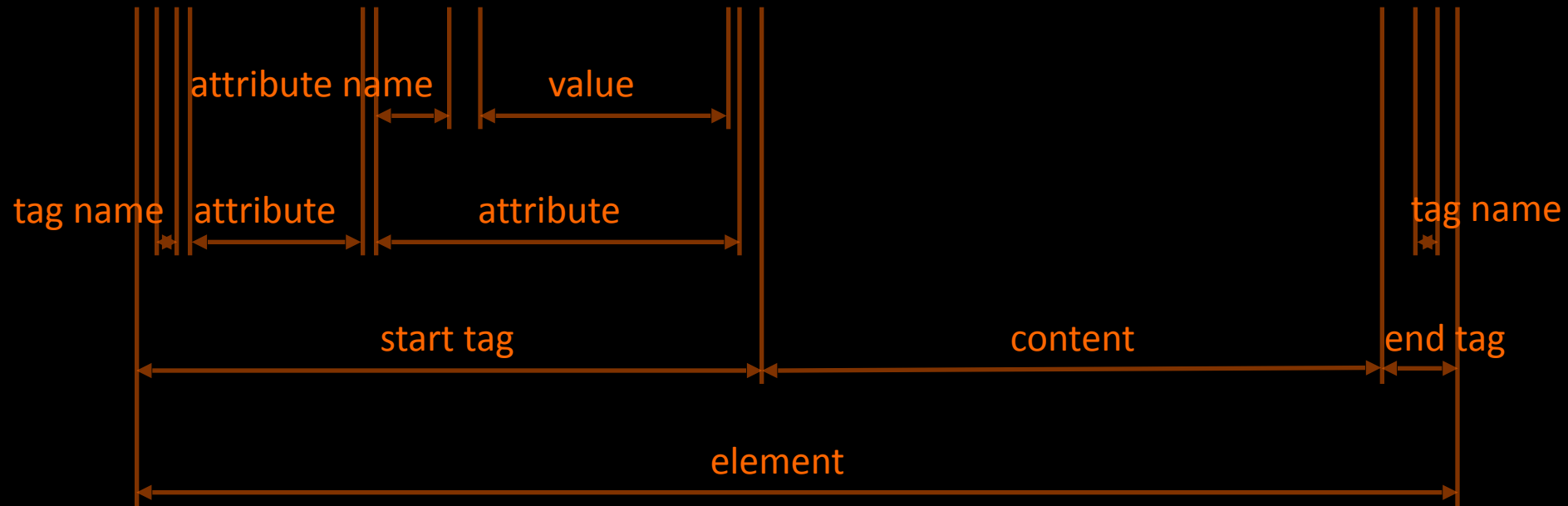
<p id="terms" class="lede important">This paragraph introduces the terms...</p>



<p id="terms" class="lede important">This paragraph introduces the terms...</p>



<p id="terms" class="lede important">This paragraph introduces the terms...</p>



```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8"/>
  <title>The Universal Declaration of Human Rights</title>
  <link rel="stylesheet" href="udhr.css"/>
</head>
<body>
  <h1>The Universal Declaration of Human Rights</h1>
  <h2>Article 1</h2>
  <p>All human beings are born free and equal in dignity
and rights. They are endowed with reason and conscience
and should act towards one another in a spirit of
brotherhood.</p>
</body>
</html>
```


`<!DOCTYPE html>`

always on top for proper rendering

`html`

root element

2 child elements: head and body

should have a lang attribute indicating the language of page content

`head`

container for character encoding, page title, link to stylesheet, metainformation

`<meta charset="UTF-8"/>`

character encoding declaration

`title`

page title (browser tab, bookmark)

`<link rel="stylesheet" href="...">`

reference to stylesheet

body

container for page content

h1 ... h6

heading, 1st ... 6th level

p

paragraph

em

emphasis

strong

strong emphasis

hyperlink

block elements

<p>Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge,</p>

<p>Now, Therefore the General Assembly proclaims this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.</p>

block elements

<p>Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge,</p>

inline elements

<p>Now, Therefore the General Assembly proclaims this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.</p>

example: udhr.html

CSS

Cascading Style Sheets

rule

```
p.lede  
{  
  font-weight: bold;  
}
```

selector

p.lede

{

font-weight: bold;

}

declaration

```
p.lede  
{  
  font-weight: bold;  
}
```

property

```
p.lede  
{  
  font-weight: bold;  
}
```

value

```
p.lede
{
  font-weight: bold;
}
```

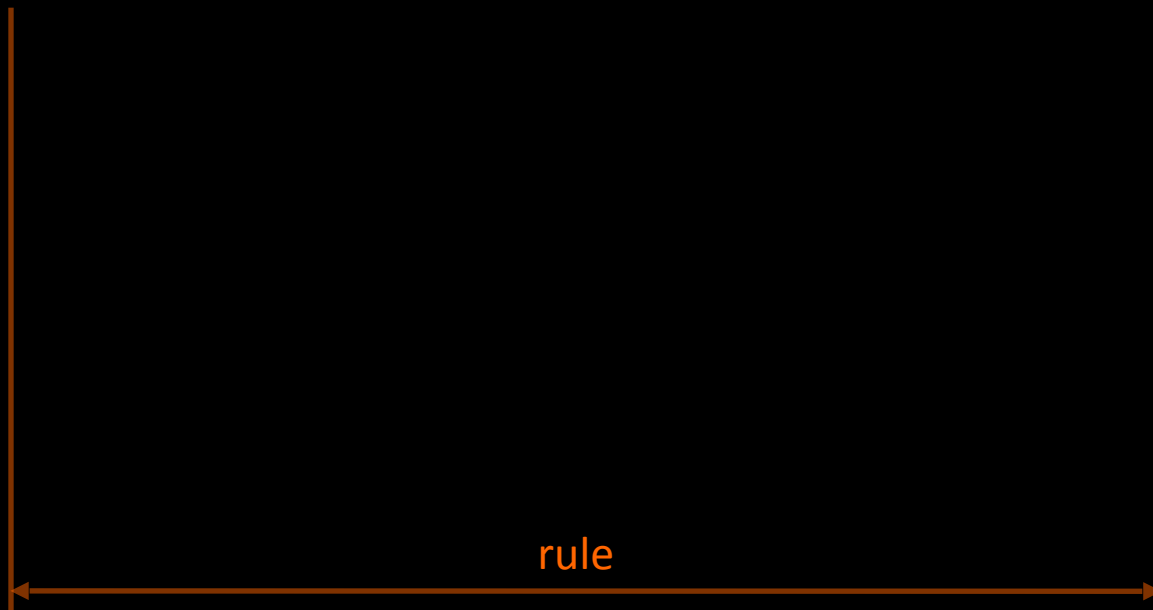
declarations

```
p.lede
{
  font-weight: bold;
  font-size: 1.25em;
}
```

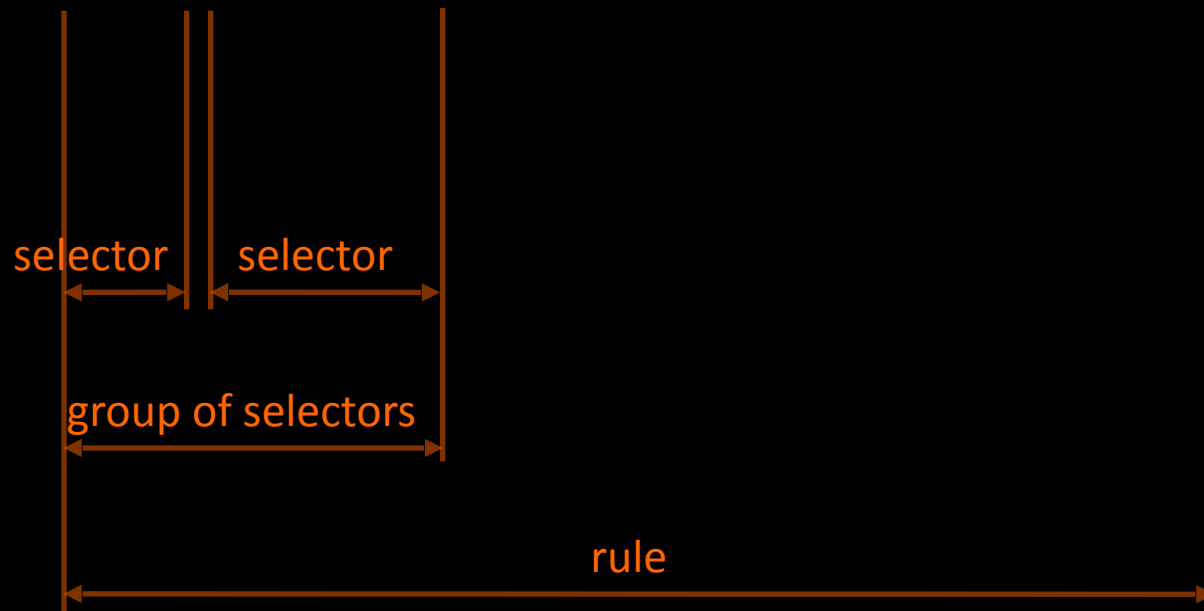
group of selectors

```
p.lede, p.important  
{  
  font-weight: bold;  
  font-size: 1.25em;  
}
```

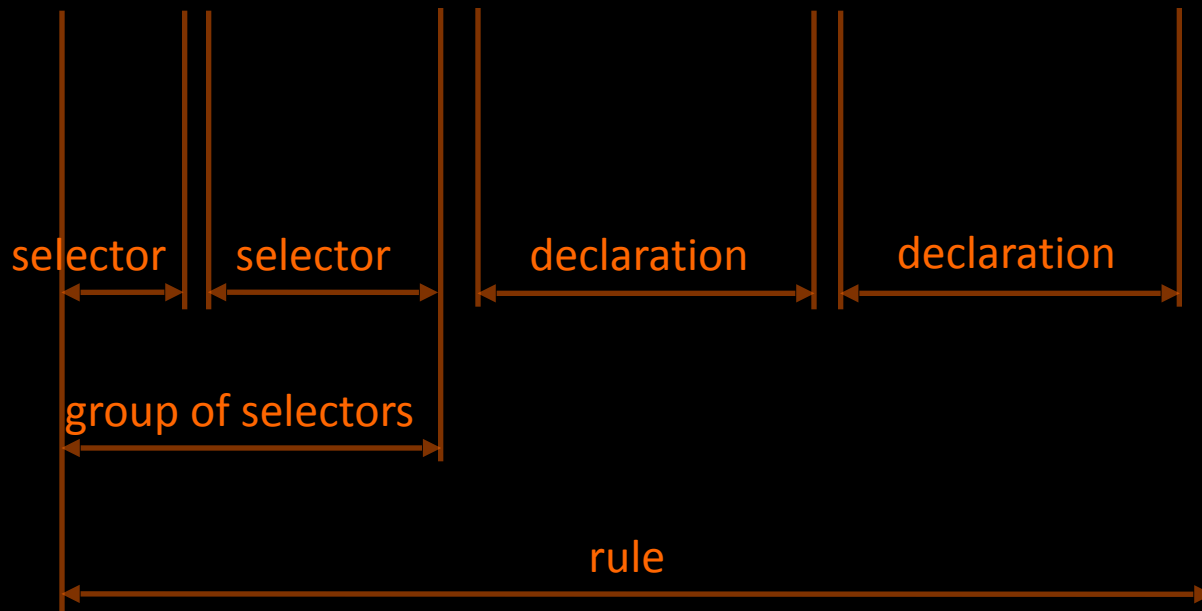
```
p.lede, p.important { font-weight: bold; font-size: 1.25em }
```



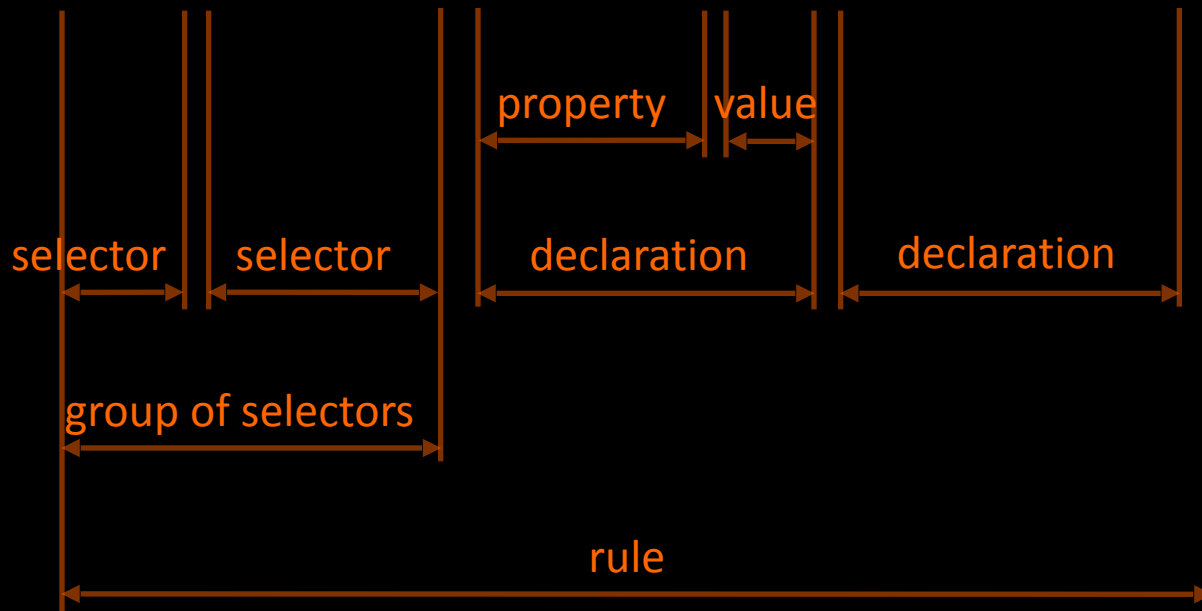
```
p.lede, p.important { font-weight: bold; font-size: 1.25em }
```



```
p.lede, p.important { font-weight: bold; font-size: 1.25em }
```




p.lede, p.important { font-weight: bold; font-size: 1.25em }



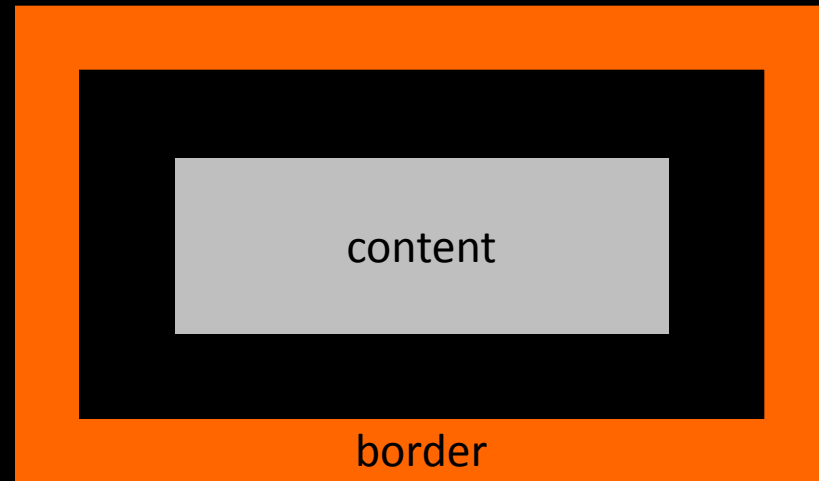
exercise: udhr.html

box model

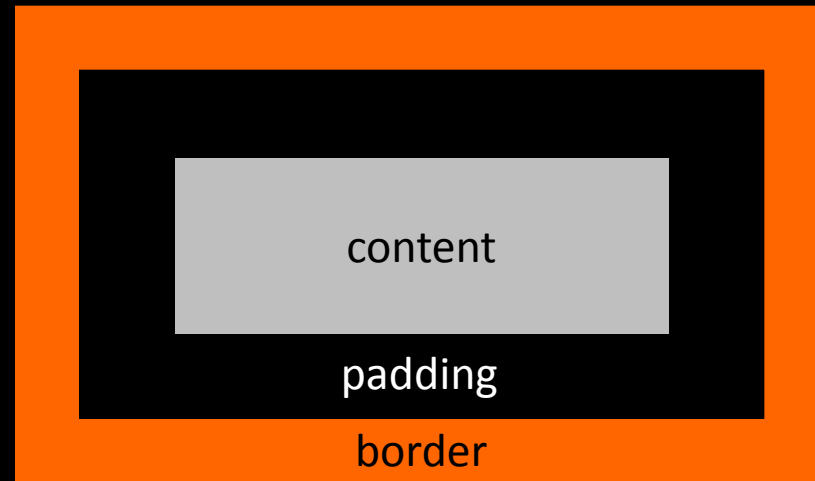


content

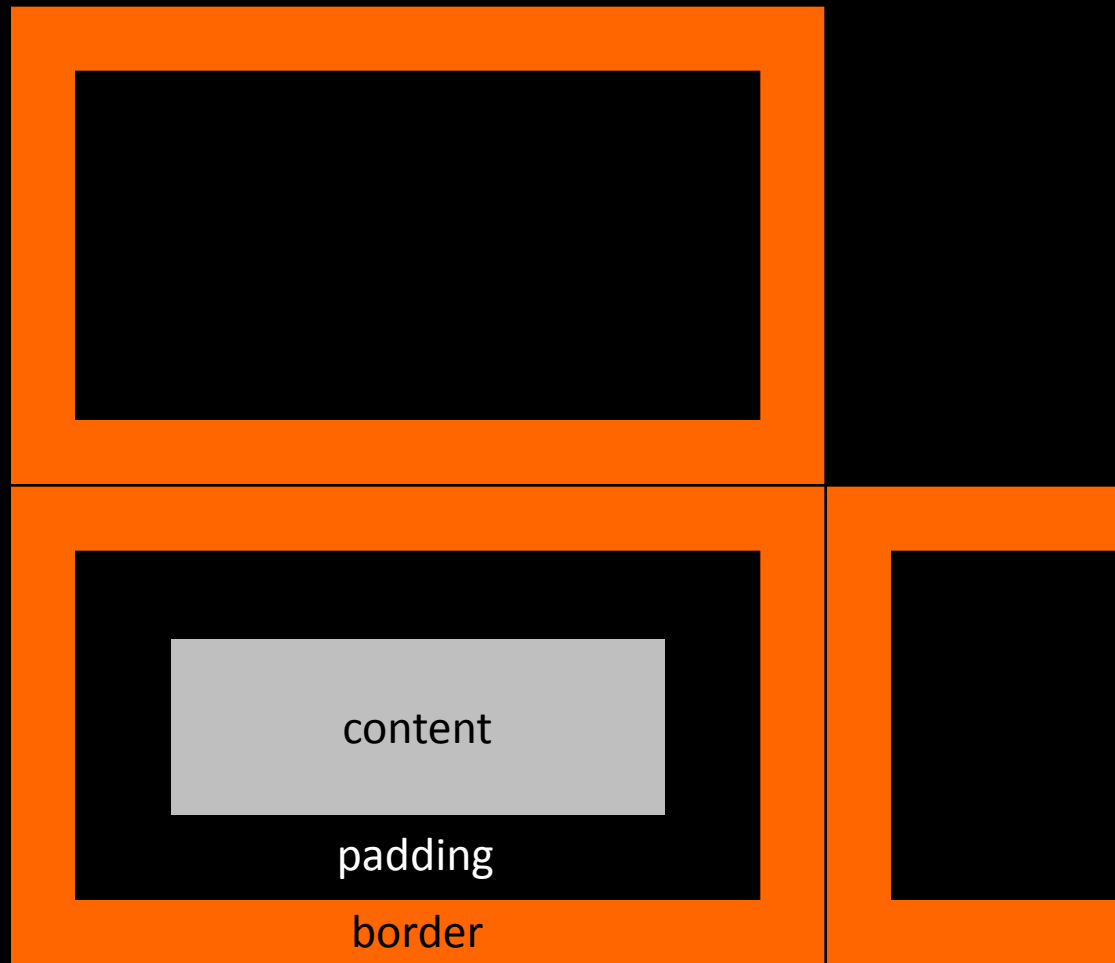
box model



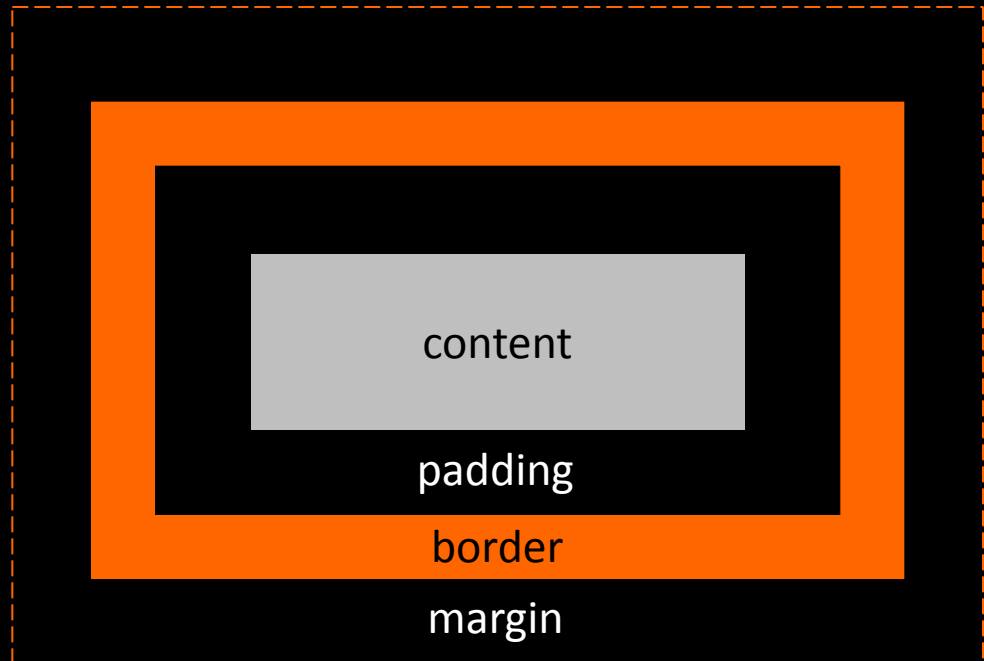
box model



box model

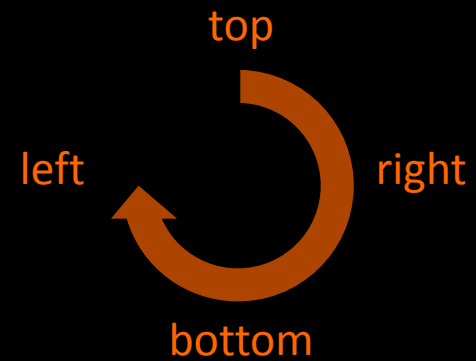


box model



```
padding-top: 1em;  
padding-right: 2em;  
padding-bottom: 3em;  
padding-left: 4em;
```

```
padding: 1em 2em 3em 4em;
```



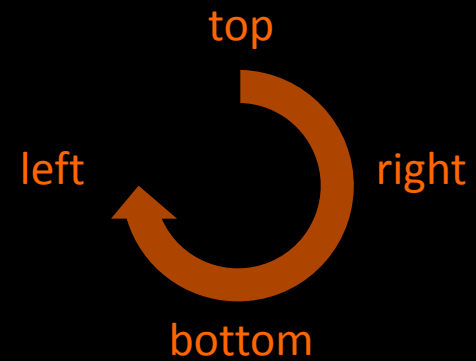

```
padding-top: 1em;  
padding-right: 2em;  
padding-bottom: 3em;  
padding-left: 4em;
```

```
padding: 1em 2em 3em 4em;
```



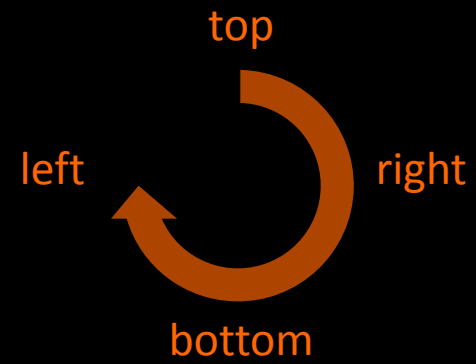
```
padding-top: 1em;  
padding-right: 2em;  
padding-bottom: 3em;  
padding-left: 2em;
```

```
padding: 1em 2em 3em;
```



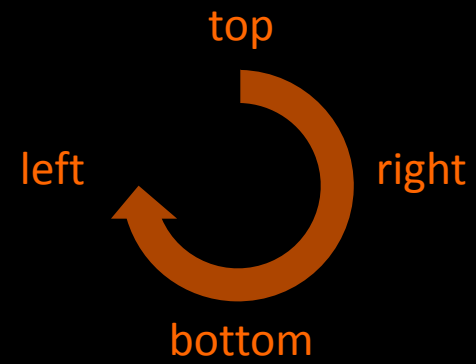
```
padding-top: 1em;  
padding-right: 2em;  
padding-bottom: 1em;  
padding-left: 2em;
```

```
padding: 1em 2em;
```



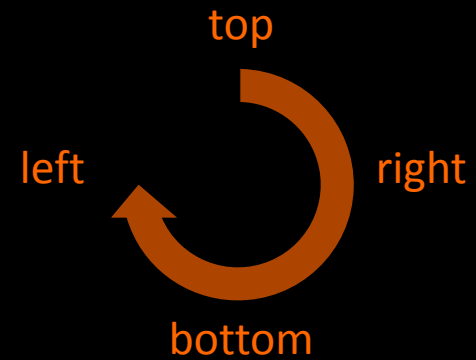
```
padding-top: 1em;  
padding-right: 1em;  
padding-bottom: 1em;  
padding-left: 1em;
```

```
padding: 1em;
```



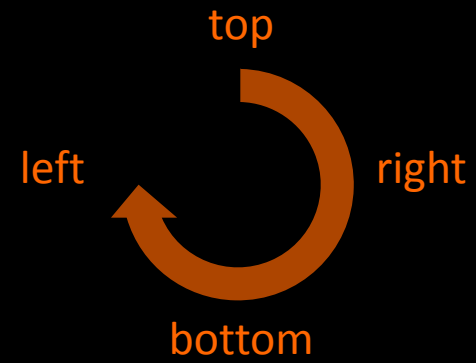
```
margin-top: 1em;  
margin-right: 2em;  
margin-bottom: 3em;  
margin-left: 4em;
```

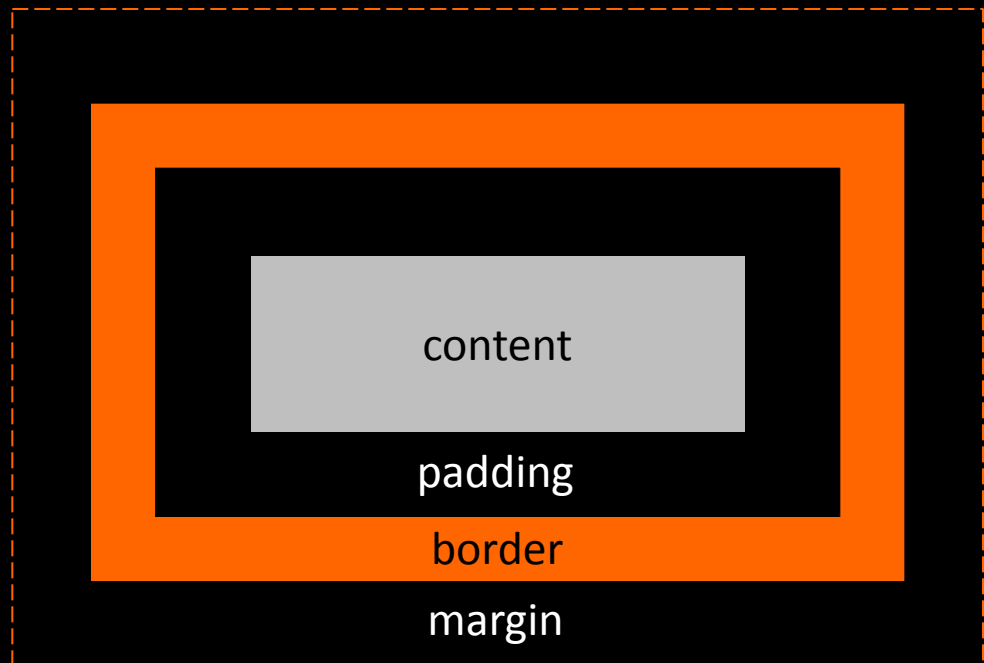
```
margin: 1em 2em 3em 4em;
```



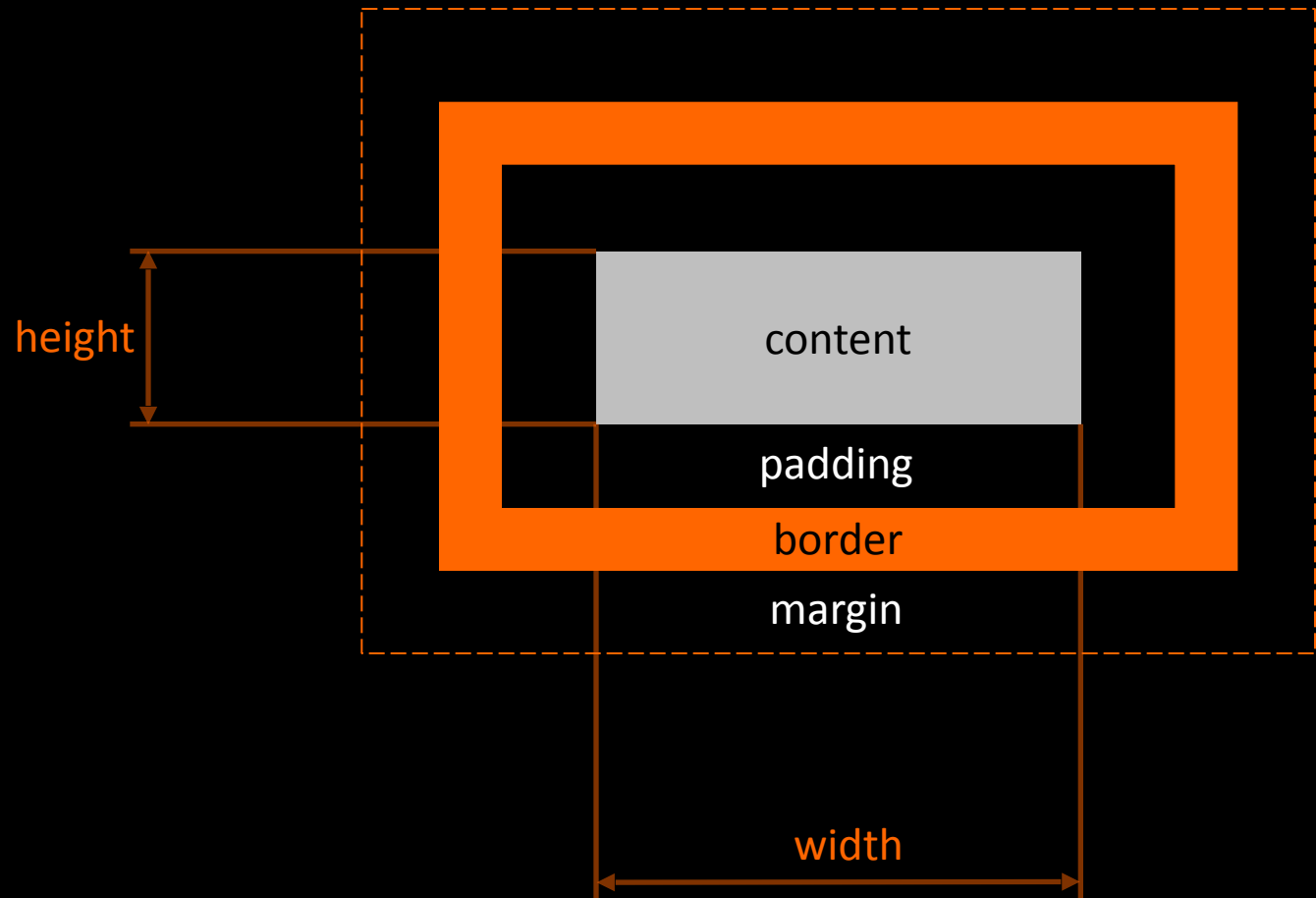
```
border-top-width: 1em;  
border-right-width: 2em;  
border-bottom-width: 3em;  
border-left-width: 4em;
```

```
border-width: 1em 2em 3em 4em;
```

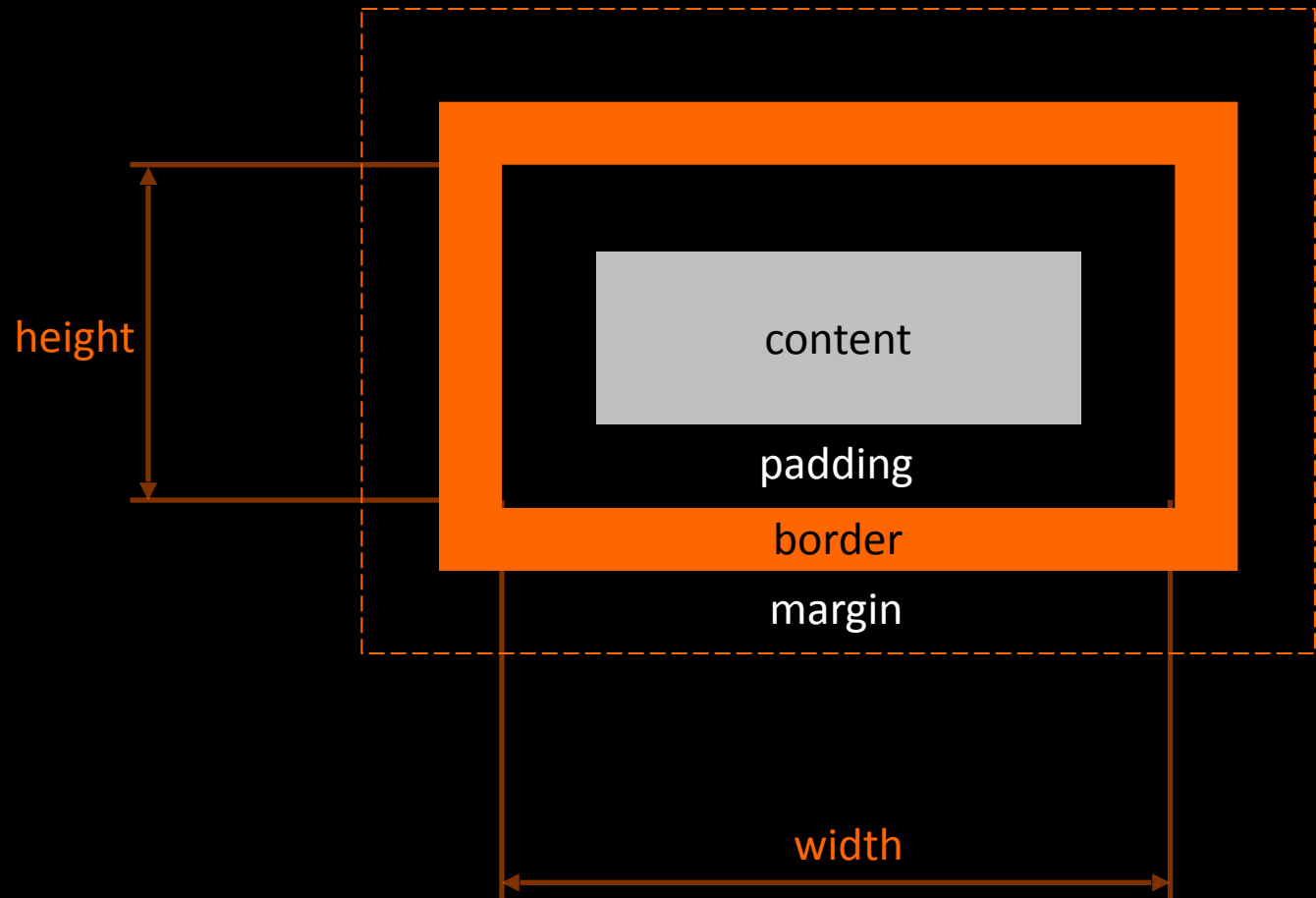




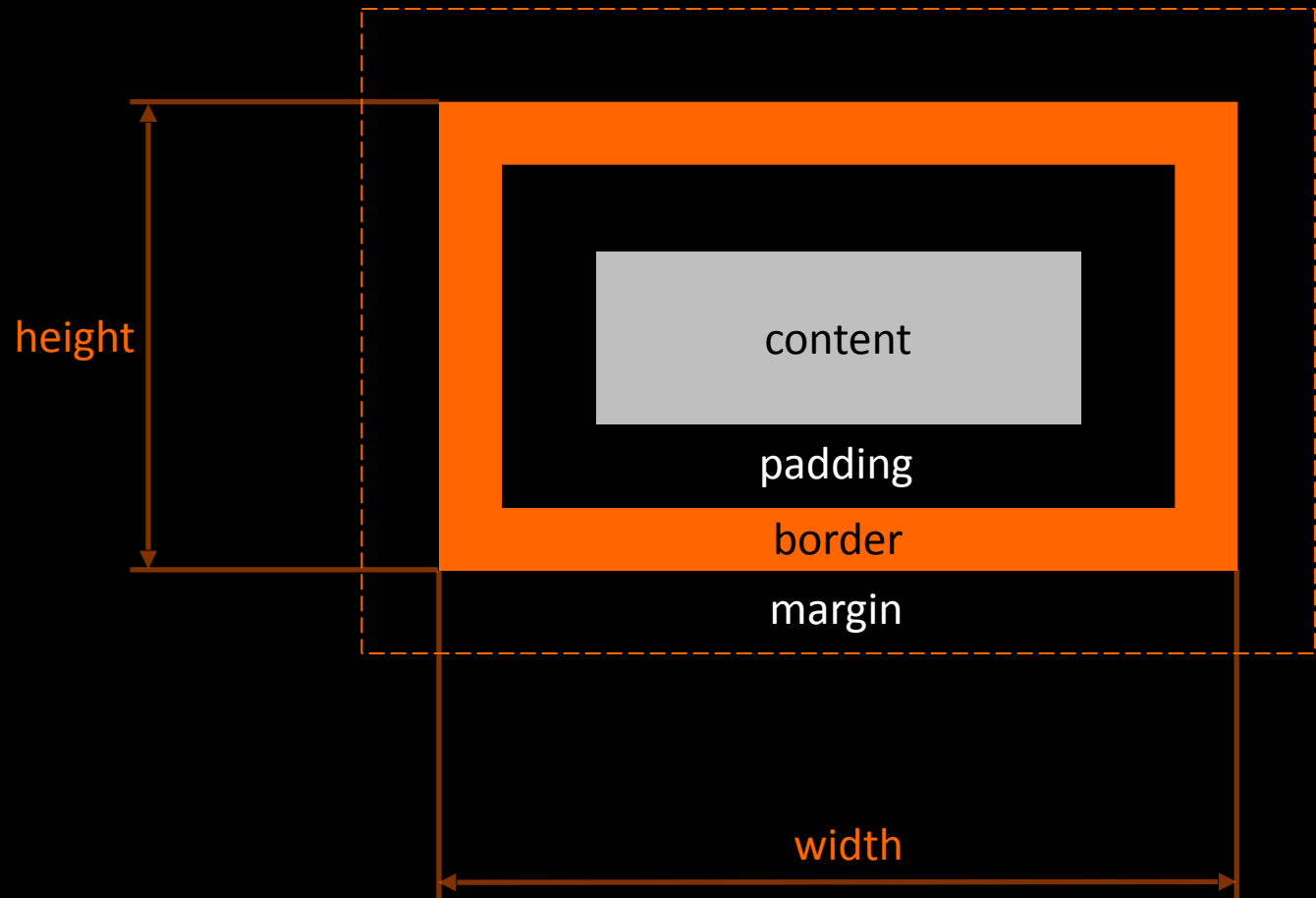
box-sizing: content-box



box-sizing: padding-box



box-sizing: border-box



`<main role="main">`

main page content; max. 1 per page

`section, article`

grouping elements, should have headings

`header, footer`

e.g. information ab. author, copyrights

`nav, aside`

navigation, tangentially related content

`div`

block element with no semantics

`span`

inline element with no semantics

``

image; alternative text mandatory

`object, audio, video`

multimedia objects

`figure`

container for multimedia objects, quotes, etc.

`figcaption`

figure caption

ol, ul

(un)ordered list; only li child elements allowed

li

list item

table

table; don't use for layout

<table role="presentation">

layout table

caption

table caption

colgroup

group of table columns

col

table column

thead, tfoot, tbody

groups of table rows

tr

table row

th

table head cell (for row or column)

td

table data cell

thead

tr

th

th

th

tbody

tr

th

td

td

tr

th

td

td

`<form action="...">`

form; action attribute required

`fieldset, legend`

grouping element, group heading

`<label for="...">`

label for input field with id, click focusses input

`<input name="..." type="..." />` input field

`textarea`

multiline input field

`button, <button type="submit">`

submit button

`<button type="button">`

other button

`input, <input type="text"/>` text input

`<input type="password"/>` password input (hidden)

`"email", "tel", "url", "number"` enable special keyboards on mobile devices

`"range"; "date", "time", etc.` browser may display slider or date/time picker

`<input required/>` input field must be filled out

`<input type="checkbox"/>` checkbox

`<input type="radio"/>` radio button; all of same name in a group

selectors

element type p

id #terms, p#terms

class .lede, p.lede

attribute a[href], a[href="#"], a[href^="http"],
img[href\$=".jpg"], p[class~"lede"]

combinators

descendant figure img

child ol > li

adjacent sibling h1 + p

general sibling h2 ~ p

pseudo-classes

:hover, :active, :focus, :link, :visited

:first-child, :last-child, :nth-child($an+b$)

:first-of-type, :last-of-type, :nth-of-type($an+b$)

:checked

:valid, :invalid

:target

:lang(en)

:not(...)

pseudo-elements

::before, ::after li::before { content: "▶" }

selector specificity

a.b.c.d

- a. style attribute?
- b. number of ID selectors
- c. number of class selectors, attributes selectors,
and pseudo-classes
- d. number of type selectors and pseudo-elements

cascading stylesheets

1. browser stylesheet
2. user stylesheet, normal declarations
3. author stylesheet, normal declarations
4. author stylesheet, important declarations
5. user stylesheet, important declarations