



# CSS design *methodology*

# Philosophy



Like the (X)HTML  
source,  
**the CSS stylesheet is  
part of our  
*deliverables***

Our deliverables reflect our  
competence.

# The stylesheet is a living document

- Several "editors"
- Considerable lifetime
- Properties and values are not important...
- ...but selectors are.

# CSS design has to be **flexible and upgradeable**

- Do tests with "extreme" content
- Test your pages with text zoom
- Consider translations issues

Ref.: *Methodology* for writing (X)HTML code, paragraph 4.6

Whereas CSS design is the  
"decoration" of a house,  
(X)HTML constitutes its  
foundations

The CSS design cannot live without  
the source code, but the source code  
lives without the CSS design

Ref.: Methodology for writing (X)HTML code, paragraph 2.1

# **Always go from *the most generic* *to the most* **specific****

- Always have as many graphic design elements as possible before you start
- It is recommended not to start the production by the homepage or specific blocks (e.g., navigation)
- Think in terms of components

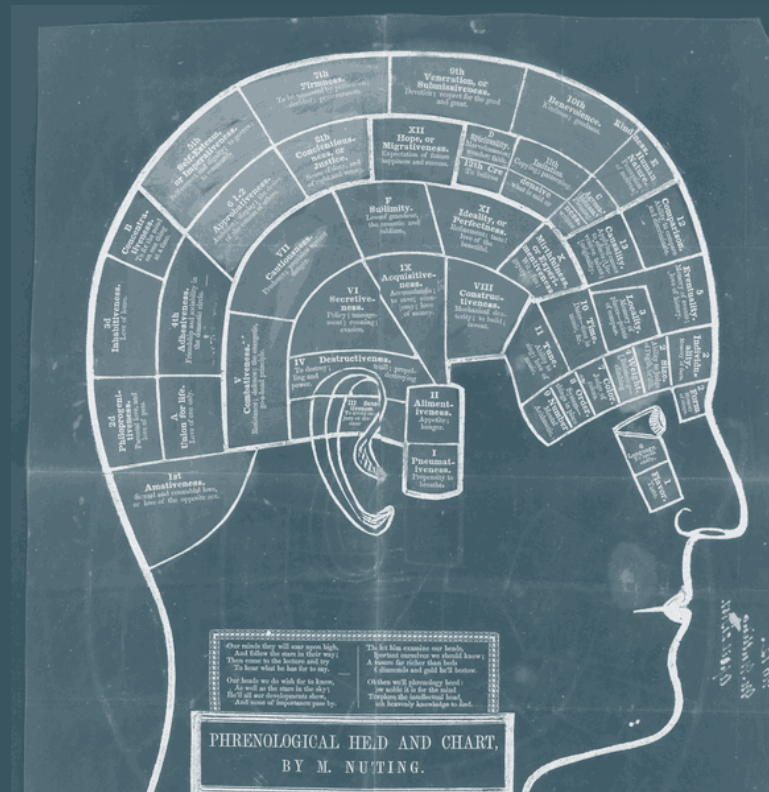
Ref.: Methodology for writing (X)HTML code, paragraphs 4.7 and 4.8

# Project scoping is **crucial**

- Page behaviour
- Accessibility needs
- Customer's requirements
- Graphic design particularities
- Versions
- CMS
- Print stylesheet



# Conventions



# Fill in the stylesheet correctly

- Name of the project, customer, role of the CSS stylesheet, author, date;
- Relationship with the other CSS stylesheets;
- Index of style groups;
- Index of colour codes may be a plus

```
/* -----  
    Worldline PlayLive / Atos Worldline  
    Main styles definitions  
    By Le Studio, Atos Worldline, 2009  
----- */  
  
/* NOTES: Used in combination with "ie6hacks.css" and "ie7hacks.css"  
style-sheets, called by conditional comments by each HTML file --  
check those CSS for corrections for IE6 and IE7 browsers  
  
Check out the "dev.css" style-sheet also for modifications or  
add-ons done by the dev team  
*/  
  
/* MAIN COLORS REFERENCE:  
    main color/red:      #C00;  
    light grey:          #CCC;  
    dark grey:           #666;  
*/  
  
/* CSS index (!):  
    DEFAULT VALUES  
    PAGE BODY STRUCTURE & MAIN ELEMENTS  
    NAVIGATION  
    TABLE SPECIFICS  
    FORMS SPECIFICS  
    SEARCH  
    GENERAL BLOCKS  
    SPECIFIC PAGES  
    EXCEPTIONS & SPECIFICS (used sitewide)  
*/
```

# Consider both *the* order and *the* **structure**

- Group the styles of the same nature and comment each group
- Use spaces and tabulations for easy viewing and editing
- Declare properties in the same order each time you define a style

```
/* ----- ! PAGE BODY STRUCTURE & MAIN ELEMENTS ----- */

/* --- MAIN BLOCKS --- */

/* Main container */
#container {
    width: 980px;
    margin: 0 auto;
}

/* Columns wrapper */
#wrapper {
    float: left;
    width: 980px;
    margin-bottom: 20px;
}

/* Columns */
#mainCt {
    float: left;
    width: 940px;
    min-height: 300px;
    color: #333;
    background: #E3E3E3;
    padding: 20px;
}

#aside {
    float: left;
    width: 956px;
    min-height: 300px;
    color: #333;
    background: #FFF url(../imgs/bg_aside.png) bottom left no-repeat;
    padding: 20px 12px;
    border-top: 3px solid #333;
}
```

# Rational grouping

Redefinition of the default values;

Page structure and main elements;

Navigation;

Table-specific styles;

Form-specific styles;

General blocks;

Styles specific to a page;

Others (pop-ups, modal windows, interactive elements, etc.);

Specific exceptions and general styles used on the entire site.

# Naming styles

- Use *Microformats* classes where possible
- Define classes and Ids in english
- Name based on function, not style
- Use classes and Ids based on the new HTML5 tags where possible

Ref.: Methodology for writing (X)HTML code, paragraph 4.4

Ref.: <http://microformats.org/wiki/semantic-class-names>



# *Imperatives*



# Preferably use **short-hand** declarations

For instance:

```
margin: top/bottom right/left;
```

```
color: #FFF;
```

# Always define relative font sizes and...

- Define a generic size of 100.1% for the BODY
- Define sizes using *em*
- Adjust them using **percentages** where needed

# ...define them for **block elements**

- Sizes can be controlled more accurately if they are defined for “**text blocks**” (block elements related to textual content):
  - P, DT, DD, LI, TH, TD, CAPTION, etc.
  - **and not:** DIV, TABLE, FORM, DL, UL, etc.
- **Inline elements** (SPAN, A, SELECT, INPUT...) must inherit their parent’s text size or size must be adjusted using percentage

List the **pseudo-selectors** for the **a** tag  
in the **correct order**

LoVeHAtE

a

a:link

a:visited

a:hover

a:active

# No quotation marks *for* URLs

```
background: #575757 url(../imgs/bg_body.png) repeat-x;
```

A diagram consisting of a light blue oval that encircles the URL part of the CSS code, specifically the text "../imgs/bg\_body.png". A thin light blue line with an arrowhead at its end points from the top right towards the center of the oval, highlighting the URL.

**Always** assign a  
**width** to a block  
that is positioned  
as "*absolute*"!



# Always assign an explicit width to a "*float*" block!

- "auto" is an acceptable value
- Image widths are implicit



# Do not assign any unit to the value 0

This is simply useless.



Always define a  
*generic font*  
**family**

Arial, Helvetica, **Sans-serif**

A diagram consisting of a thin white line that starts from the upper right and points diagonally down and to the left, ending with a small arrowhead pointing at the text 'Sans-serif'. The text 'Sans-serif' is enclosed within a thin white oval.

# *Consider* IE 6's **limited** support for **selectors**

- No `class1.class2` {...}
- No `input[type=submit]` {...}

# Good Practices



# Use a **reliable**\* browser for CSS design

...then do tests with all the other browsers.

\* Not Internet Explorer

# First, *equalize*

Equalize the default values of tag properties:

```
body, div, dl, dt,  
  dd, ul, ol, li,  
  h1, h2, h3, h4, h5, h6,  
  pre, code, form, fieldset,  
  legend, input, textarea,  
  p, blockquote, th, td {  
  padding: 0; margin: 0;  
} /* reset */
```

# Think before grouping *selectors* into the same definition

- This helps save Kbs but causes a loss of flexibility and many misunderstandings
- This has to be avoided if selectors are used in different contexts
- Good analysis of HTML components before the CSS design may prove much more useful to improve the weight and the structure of the stylesheet

# *Do not leave any* **useless definitions** **or properties**

- Test properties have to be deleted
- Check for properties that "do nothing" or are redundant:

```
strong {font-weight: bold;}
```

Specify widths using  
*percentages* as much  
as possible

Flexibility and upgradeability:

if the width of the parent changes, the width of the children changes  
too.



# Hide navigation aid links *correctly*

- Certain speech synthesizers will read `display: none;`
- Preferably use a negative top/left margin or text-indent

# Be careful before *aligning* an element **vertically**

- `line-height` has to have the same height as the parent element
- Always use *em* or *ex* to define the height in order not to suppress the ability to zoom in

# Stick to the same **logic** to define *spacing*

Always define the bottom and right margins, for  
example, for all blocks (following the page  
assembly logic)

For "liquid" design,  
always define a  
*maximum* and a  
minimum width

And consider *media queries* for  
different sizes of devices



# DEBUGGING

**No, you cannot  
do without  
FireBug!**

# Only *good* reflexes...

- The DOCTYPE is present in the right place and is the correct one, and it is complete
- Take IE's bugs into account
- Add a background colour to the block that may cause the problem to better understand its behaviour

*Validate* the

**F**\*%!? \$ ⌘ £

page!



*"Hey, kid! Have you  
thought about the  
double-margin bug?"*



*For IE6 and IE7,*  
consider the  
**HASLAYOUT**  
property



# *Elements with “layout” by default:*

html	hr	iframe
body	input	embed
table	button	object
tr	select	
th	textarea	
td	fieldset	
img	legend	



# *CSS Properties that “give layout” to an element:*

IE6	IE7
position: absolute	position: absolute
float (right / left)	float (right / left)
display: inline-block	display: inline-block
width (all values besides " auto ")	width (all values besides " auto ")
height (all values besides " auto " - a value of 1% is valid)	height (all values besides " auto " - a value of 1% is valid)
zoom (IE property - avoid it: page won't validate)	zoom (IE property - avoid it: page won't validate)
	position: fixed
	min-width/max-width (all values)
	min-height/max-height (all values)
	overflow: hidden scroll auto