TRANSFORMING XML AND HTML DOCUMENTS TO PDF

PART 1 – BASIC CSS LAYOUT

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syncro soft

<oXygen/> XML Editor

Introduction – What is CSS?

- Stands for Cascading Style Sheets
- Enables the separation of presentation and content
- Makes it easy to reuse the styling across multiple documents
- Defines a cascading priority scheme

Poll

What is your level of CSS?

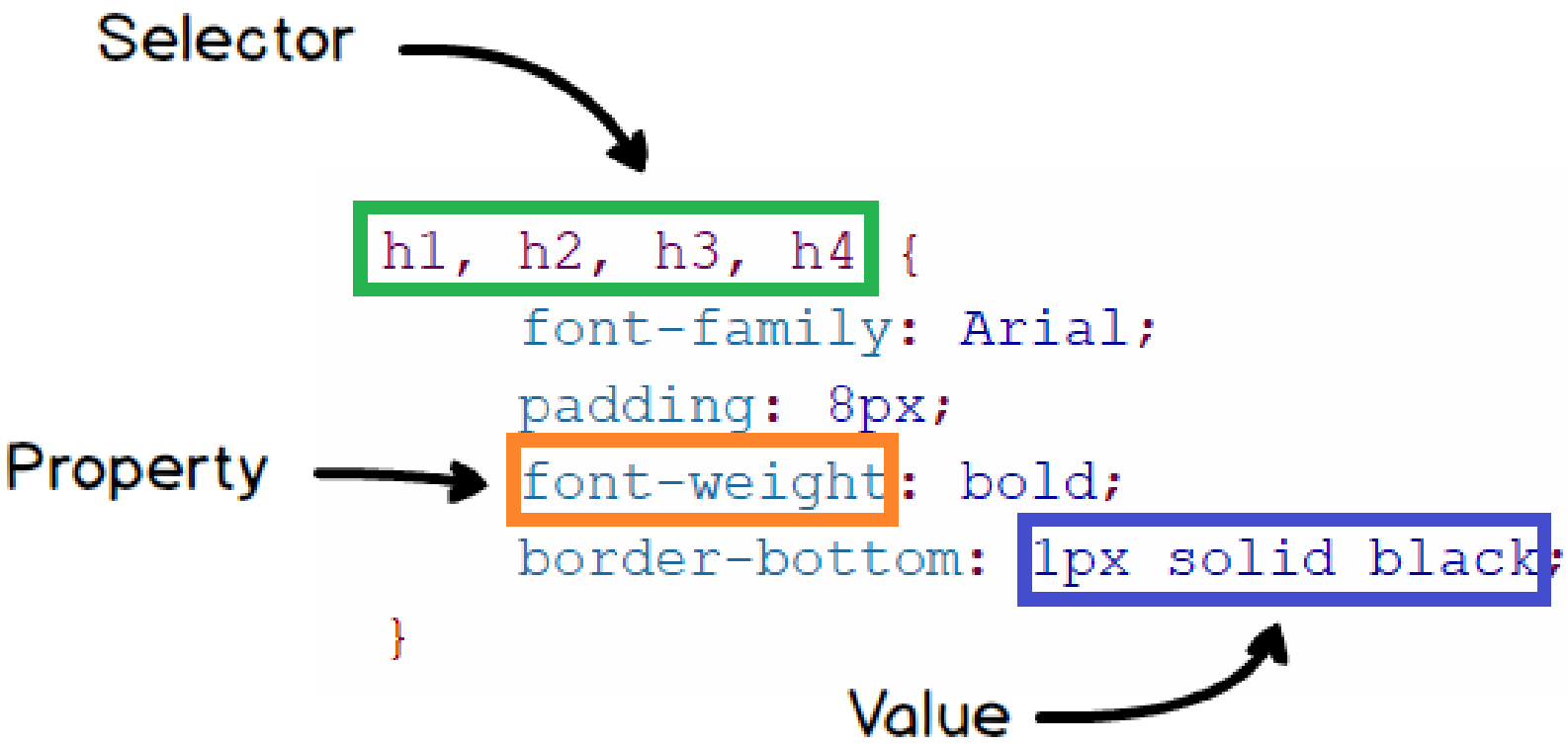
Poll Results

Poll

What type of documents are you using?

Poll Results

Introduction – CSS Syntax



Introduction – CSS Priority Scheme

From Highest to Lowest:

1. Importance – Usage of the CSS '!important' annotation
2. Media Type – Applies to all unless a specific media is defined
3. User Defined – User custom CSS Style Sheets
4. Rule Order – Last rule declaration has a higher priority
5. Inheritance – If no rule is specified, the parent rule is applied
6. Oxygen Default – Predefined Oxygen CSS rules
7. User Agent – Browser default values (when using HTML only)

Introduction – CSS Style Priority

- Specificity – The longer the rule, the higher its priority
  p vs. div p

  ul li vs. body p ul li
- Selector Type – ID Selector > Class Selector > Element Selector
  #main vs. .example vs. p
- Order – If two selectors are identical, the last one is used

Introduction – CSS Media Types

- **print** – For paged material and documents printed or viewed on a screen in print preview mode

```
@media print {
  * {
    color: black;
  }
}
```

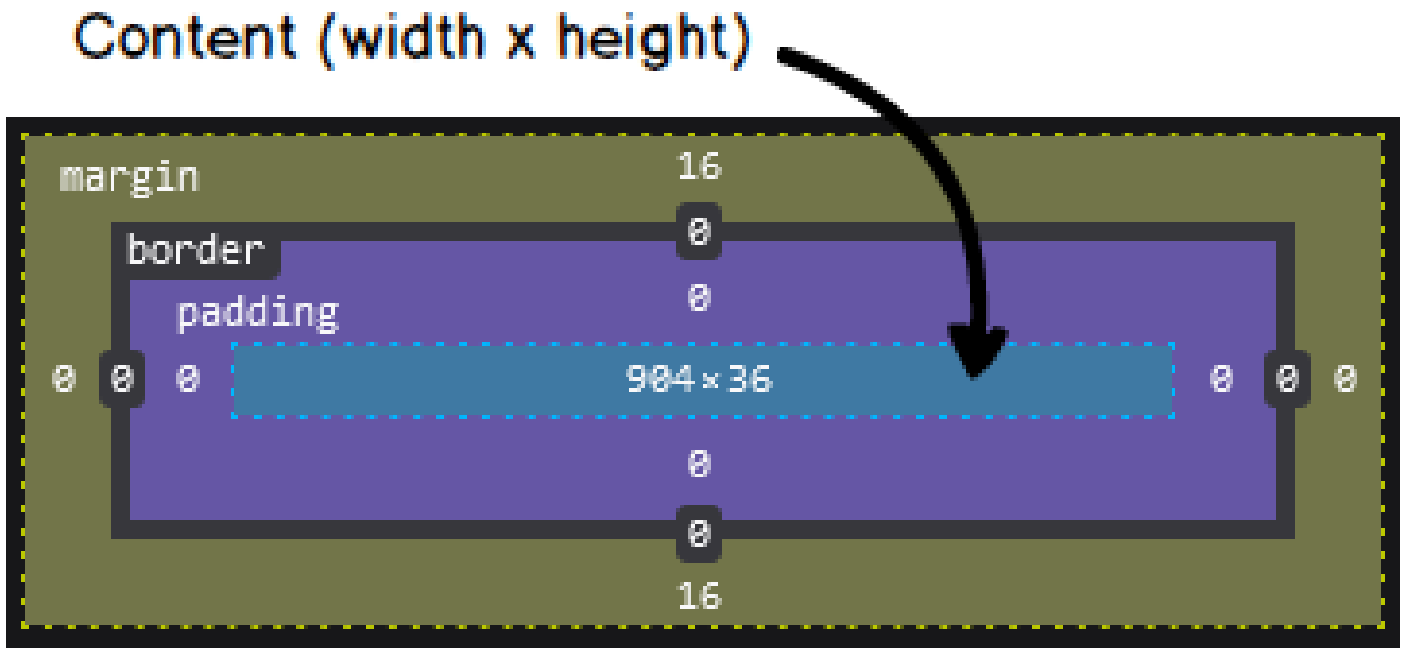
- **oxygen-chemistry** – Similar to print but applies only for documents generated using Oxygen PDF Chemistry

```
@media oxygen-chemistry {
  p {
    margin-left: 1in;
  }
}
```

Debugging the CSS

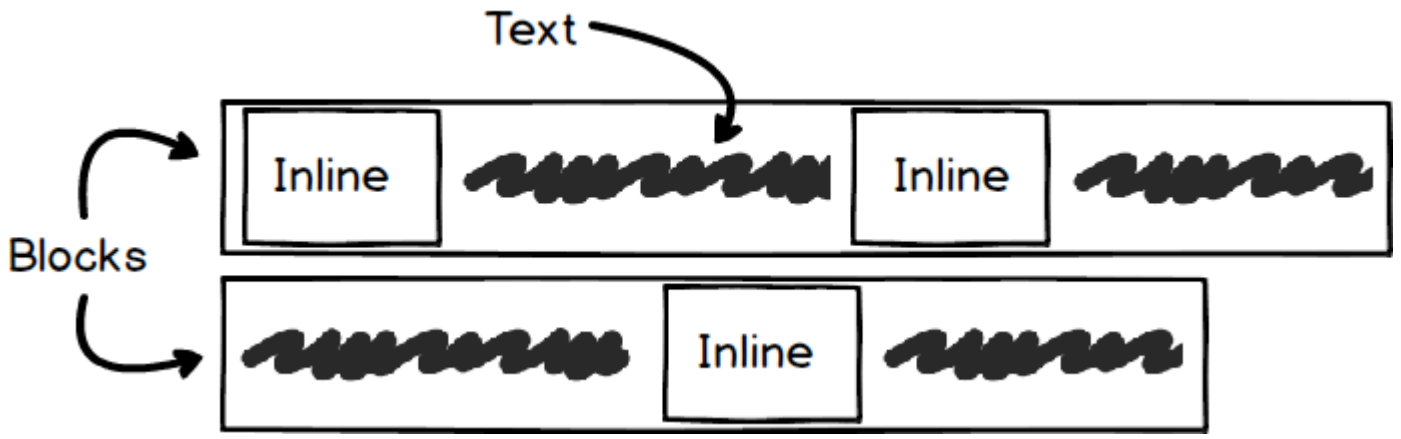
- Useful for identifying issues and resolving them
- Can be done in either Oxygen's Author mode or in a browser
- Shows all applied rules (including the default user agent, computed values and displayed fonts)
- Shows a Box Model (only in browsers)

The Box Model



Define Inline and Block elements

- Use the CSS ‘display’ property
- Set the basic values ‘block’ or ‘inline’



Define Margin and Padding

- Use the Box Model to check where the values are applied
- Add a background-color to see the box model inside the document
  - The padding is inside the box
  - The margin is outside the box
- Use the shorthand property to apply the value on top, bottom, left, and right
- Use the specific property to apply the value on a specific location (e.g. margin-right, padding-top)

Define Borders

- Use the Box Model to check where the values are applied
- Use the shorthand property to apply the values on all the borders
- Warning: The ‘border’ shorthand stands for
  - border-width
  - border-style
  - border-color
  - border-top
  - border-bottom
  - border-left
  - border-right

and the combination of these properties (e.g. border-top-color, border-left-width)

Define Colors

- Use the CSS ‘color’ and ‘background-color’ properties
- Supported values:
  - named → red
  - hex → #c86442
  - rgb() → rgb(214, 122, 127)
  - etc...

Define Links

- Usage of the ‘link’ property and ‘attr()’ function

```
link {
    color:blue;
    link:attr(href);
    text-decoration: underline;
}
```

Define Fonts

- Usage of the ‘font-family’ and ‘font-size’ properties
- font-family value can be
  - A generic family name → sans-serif, monospace
  - A font family name → Arial, “Times New Roman”
- Usually font-size value is defined in points (pt)
- Additional useful font properties:

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

```
italic {
    font-style: italic;
}
```

Define Web Fonts

- Import the fonts directly (for example using https://fonts.google.com/)
- Download the fonts and declare it using the '@font-face' rule
- For more information see:

https://www.oxygenxml.com/doc/versions/22.1/ug-chemistry/topics/ch_fonts_font_embedding.html

Define Pages

- Usage of the print specific '@page' rule
- Usage of the page margin boxes to set some content
- Declare some counters to be used in the page

https://www.oxygenxml.com/doc/versions/22.1/ug-chemistry/topics/ch_page_margin_boxes.html

To go further...

Oxygen PDF Chemistry User Guide:

- https://www.oxygenxml.com/doc/versions/22.1/ug-chemistry/topics/ch_styling.html

Mozilla Developer Network (MDN):

- https://developer.mozilla.org/en-US/docs/Learn/CSS/First_steps

Oxygen PDF Chemistry Tutorial:

- https://www.oxygenxml.com/doc/versions/22.1/ug-chemistry/topics/ch_putting_all_together.html

THANK YOU!

Any questions?

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