

# **WEB TECHNOLOGIES**

# CSS – Cascading Style Sheet and Selectors

# **Vinay Joshi**

Department of Computer Science and Engineering

#### Introduction



#### HTML without CSS

Home page
Minings
My town
Links

My first styled page

Welcome to my styled page!

It lacks images, but at least it has style. And it has links, even if they don't go anywhere.

There should be more here, but I don't know what yet

Made 3 April 2004

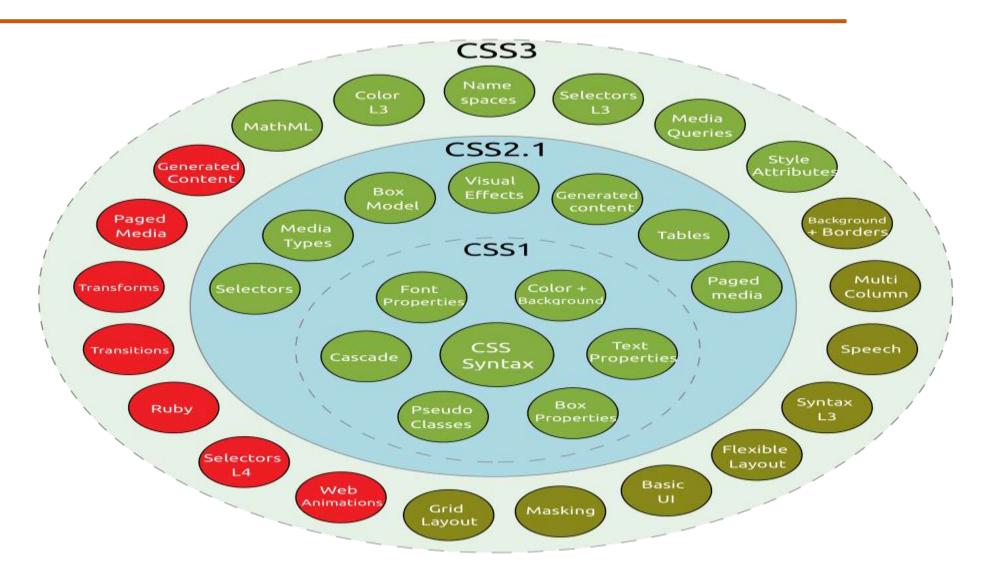
By myaef.

#### HTML with CSS



#### Introduction





### Three ways to include CSS

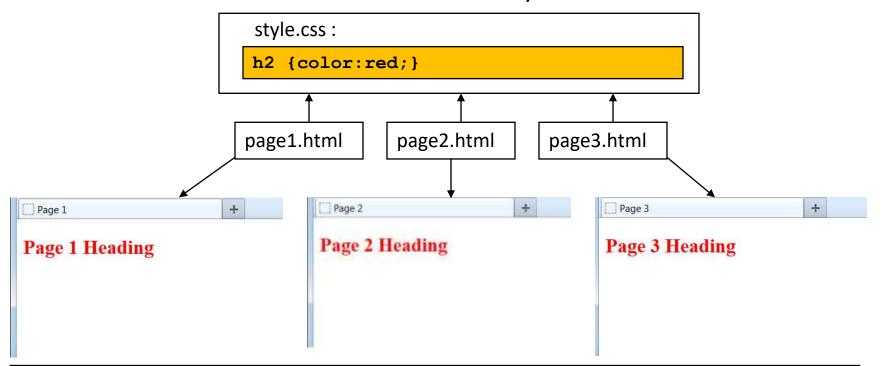


- 1) Inline Style CSS is placed directly into the XHTML element.
- 2) Internal Style Sheet CSS is placed into a separate area within the <head> section of a web page.
- 3) External Style Sheet CSS is placed into a separate file and "connected" to a web page.

#### **Benefits of External Style Sheets**



The real power of using an external style sheet is that multiple web pages on our site can link to the same style sheet:



Styles declared in an external style sheet will affect all matching elements on <u>all web</u> <u>pages that link to the style sheet</u>. By editing the external style sheet, we can make site-wide changes (even to hundreds of pages) instantly.

#### **Internal vs. External Style Sheets**



#### **Internal Style Sheets**

- are appropriate for very small sites, especially those that have just a single page.
- might also make sense when each page of a site needs to have a completely different look.

#### External Style Sheets:

- are better for multi-page websites that need to have a uniform look and feel to all pages.
- make for faster-loading sites (less redundant code).
- allow designers to make site-wide changes quickly and easily.

External style sheets create the furthest separation between content and presentation. Hence, the best option when creating a new site.

#### **Conflicts**



- Same formatting rules can be defined in all three locations at the same time.
- For example, a paragraph element could contain an inline style (color:red) but the internal style sheet (color:blue) and the external style sheet (color:green) give conflicting instructions to the web browser.
- Web browsers need a consistent way of "settling" this disagreement.

#### **Cascading in CSS**



- We use the term cascading because there is an established order of priority to resolve these formatting conflicts:
  - Inline style (highest priority)
  - 2) Internal style sheet (second priority)
  - 3) External style sheet (third priority)
  - 4) Web browser default (only if not defined elsewhere)

For each XHTML element, the browser will combine all the styles defined at different levels. For all conflicts, it will use the above priority system to determine which format to display on the page.

In the prior example, the paragraph would display as red, because the inline style "outranks" all the others.

#### **Selectors**



- Primary Selectors
- Nested Selectors
- Multiple Selectors
- Pseudo Selectors



# **THANK YOU**

# **Vinay Joshi**

Department of Computer Science and Engineering

vinayj@pes.edu

+91 80 2672 6622