

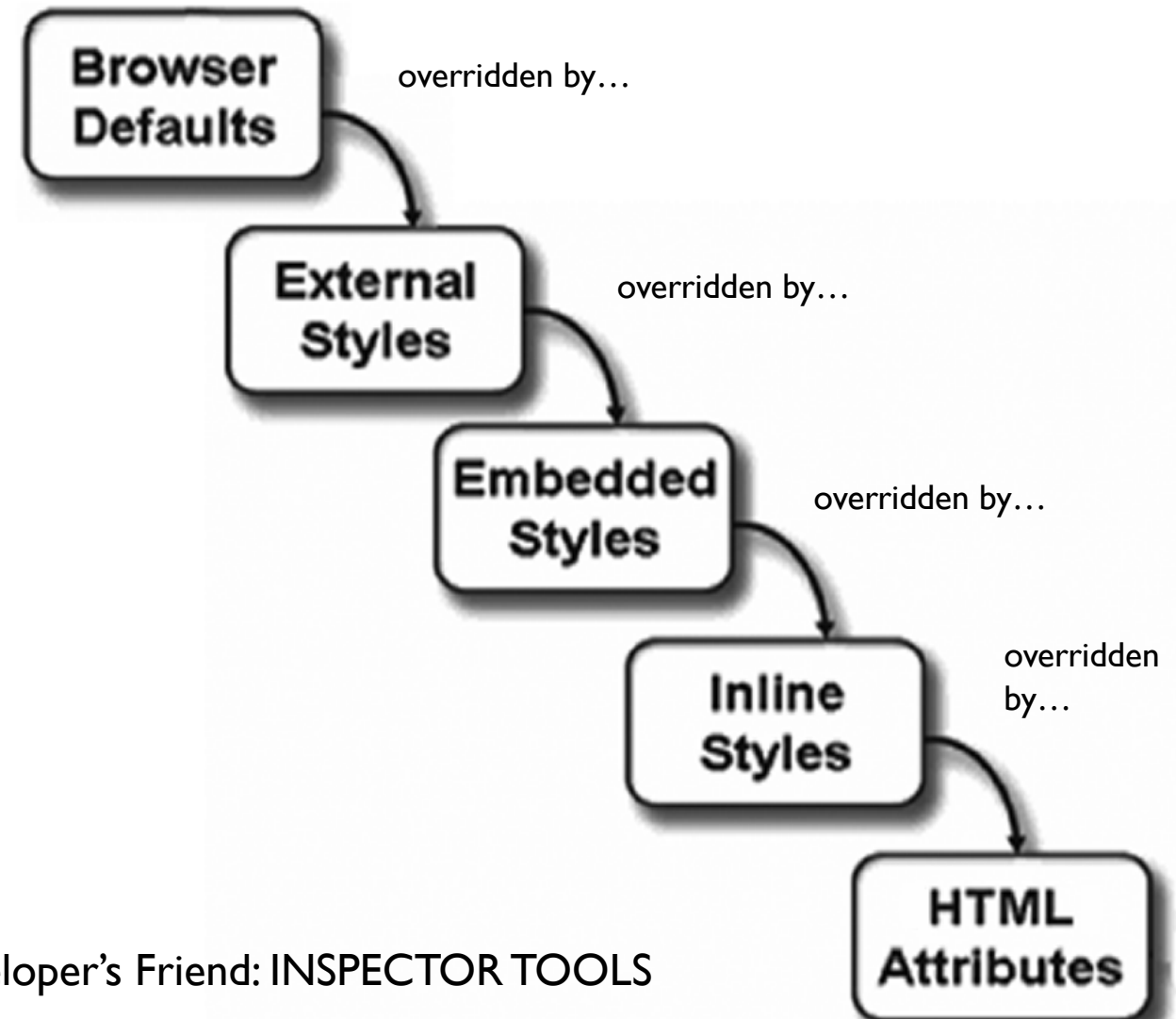


CSS ARCHITECTURE

HOW TO KEEP YOUR CSS-SANITY

CSS – THE WILD WILD WEST

- Multiple levels – external, embedded, inline
- Multiple CSS files – local file system and remote (CDNs)
- Intricately designed websites ...thousands (tens of thousands?) of lines of CSS
- CSS Frameworks on top of CSS Frameworks
- JavaScript functions insert inline styles dynamically



REMEMBER: The Web Developer's Friend: INSPECTOR TOOLS

THE WILD, WILD WEST

- Mandatory: large websites
 - Thousands of lines of CSS
- Separate CSS files
- CSS Groupings
 - Comment separators
- Keep similar styles together
- Any logic is better than no logic
- 2011: Jonathan Snook → SMACSS

```
/* *****  
Section: special styles  
***** */
```

A decorative wavy line in yellow and white on the left side of the image.

RESET AND NORMALIZE

CSS LIBRARIES

RESET BY ERIC MEYER

- Idea: default browser settings are evil – they must die!
- Your first CSS file: `reset.css`
- Everything looks plain THEN start styling
- Seemed like a good idea (in 2011)
- Problems:
 - Additional effort
 - Different browsers render pages differently – still need browser testing
 - They don't save time

NORMALIZE BY NICOLAS GALLAGHER

- Idea: browsers render webpages differently; pick a standard and force them all to follow it
- Your first CSS file: `normalize.css`
- For better cross-browser consistency
- Fixes browser bugs (whenever possible)
- Leaves browser defaults intact (unlike `reset.css`)



SMACCs

AN OPINIONATED METHODOLOGY

SMACSS

(SCALABLE AND MODULAR ARCHITECTURE FOR CSS)

- Pronounced "smacks"
- Style guide (not a library, not a template)
- Jonathan Snook – web developer, author, Canadian
 - Circa 2011
 - One of the first published/popular methodologies for CSS organization
 - New concepts introduced:
 - Groupings: Base, Layout, Module, State, Theme
 - "depth of applicability" and the importance of "shallow design"

SMACSS' STRUCTURE

Create sections – defined by purpose

- By filename or by comment-sections

```
/* *****  
    Base styles  
    ***** */  
  
body { ...  
h1 { ...  
  
/* *****  
    Layout styles  
    ***** */  
  
...
```

Sections:

- Base
 - Defaults for the website
 - Exclusively element selectors
 - e.g. `p { color: #333333; }`
- Layout
 - Page "areas" – physical locations
 - e.g. `#hero { border: 5px...`
- Modules
 - Reusable, generic, simple
 - e.g. `.danger{ color: red; }`
- State
 - Inserted by JavaScript
 - e.g. `.is-current {...`
- Theme...



SINCE SMACCS

MORE OPINIONATED METHODOLOGIES

FLAVORS

- [SMACSS](https://smacss.com/)
 - <https://smacss.com/>
- [BEM](https://en.bem.info/)
 - <https://en.bem.info/>
- [OOCSS](http://www.smashingmagazine.com/2011/12/12/an-introduction-to-object-oriented-css-oocss/)
 - <http://www.smashingmagazine.com/2011/12/12/an-introduction-to-object-oriented-css-oocss/>
- [Point North](http://pointnorth.io/#base-browser-styling)
 - <http://pointnorth.io/#base-browser-styling>
- [ITCSS](http://itcss.io/)
 - <http://itcss.io/>
- [Title CSS](http://www.sitepoint.com/title-css-simple-approach-css-class-naming/)
 - <http://www.sitepoint.com/title-css-simple-approach-css-class-naming/>
- [Idiomatic CSS](https://github.com/necolas/idiomatic-css)
 - <https://github.com/necolas/idiomatic-css>
- [Atomic Design](http://patternlab.io/resources.html)
 - <http://patternlab.io/resources.html>
- [SUIT CSS](https://github.com/suitcss/suit/blob/master/doc/naming-conventions.md#utilityname)
 - <https://github.com/suitcss/suit/blob/master/doc/naming-conventions.md#utilityname>
- [Kickoff CSS](https://trykickoff.github.io/learn/css.html#namingscheme)
 - <https://trykickoff.github.io/learn/css.html#namingscheme>