

CSS Wrap-Up

Lists as a Navigation System

CSS Layout

CSS Animations

How HTML and CSS standards evolve



Navigation

Creating Navigational Elements
Using HTML & CSS



Navigation Goals

The two questions that every navigation system *must* answer, on *every* page, *all the time* are...



Navigation Goals

- *Where Am I?*
- *Where Can I Go From Here?*



Here, Both Questions Are Answered

The screenshot shows a web page titled "CSS 3" with a navigation bar at the top. The navigation bar has three items: "Backgrounds" (highlighted in red), "Text Effects", and "Box Effects". Below the navigation bar, there are two columns. The left column is titled "Links" and contains two links: "Nav bar tutorial" and "http://www.css3.info/". The right column is titled "What's new in CSS3 backgrounds?" and contains a numbered list: "1) How about the `background-size` property that will let you change the size of background images? Uncomment the CSS in the <style> tag to see the results. Test first in Safari to see it work, then try other browsers." At the bottom of the right column, there is a section titled "Prometheus Heats Things Up".

CSS 3

Backgrounds Text Effects Box Effects

Links

[Nav bar tutorial](#)
<http://www.css3.info/>

What's new in CSS3 backgrounds?

1) How about the `background-size` property that will let you change the size of background images? Uncomment the CSS in the <style> tag to see the results. Test first in Safari to see it work, then try other browsers.

Prometheus Heats Things Up

- Notice that the name of the page that the user is on has a *bright red* background.
- We accomplished this with a style named `#current`. We then applied this style to the appropriate link.



Creating a Navigation Bar With an HTML List

CSS 3

Backgrounds **Text Effects** **Box Effects**

Links

[Nav bar tutorial](#)
<http://www.css3.info/>

What's new in CSS3 backgrounds?

1) How about the `background-size` property that will let you change the size of background images? Uncomment the CSS in the `<style>` tag to see the results. Test first in Safari to see it work, then try other browsers.

Prometheus Heats Things Up

- The navigation bar above is actually a `` tag
- The list items have their `display` property set to `inline`, rather than the default (`block`), which makes them display next to one another.
- In today's ICE, you will create this navigation bar.



CSS Property: Display

- Values:

- block
- inline
- inline-block
- table-cell
- flex

} very important in
doing layout!

Example...

HTML:

```
<article class="story">  
    Lorem ipsum...  
</article>
```

```
<aside class="story">  
    Sed imedent...  
</aside>
```

CSS:

```
.story { display: table-cell; }
```



The CSS Display Property

- **display: block;**
 - **Stacks-up, top-over-bottom with other elements**
 - Uses the “box model” (padding, margin, borders)
 - Is 100% wide (takes-up all the width on a line)
- **display: inline;**
 - **Lines-up, side-by-side with other elements**
 - Ignores or does strange things to padding, margin, borders (no box model)
 - Is only as wide as it needs to be; if wider than 100%, wraps to the next line
- **display: inline-block;**
 - Uses the “box model” (like display: block) AND...
 - Is only as wide as it needs to be (like display: inline)
- **display: table-cell;**
 - Neighboring block elements line-up side-by-side with equal height
 - Ignores some aspects of the “box model”
- **display: flex;**
 - Neighboring block elements line-up side-by-side with equal height
 - Uses the “box model”



CSS Flexible Box Layout Module

- Referred to as “flex” or “flexbox” and is a CSS display property

```
display: flex;
```

- Some common properties used with flex box layout:
 - display
 - flex-direction
 - flex-wrap
 - flex-order
 - justify-content



CSS Flexible Box Layout Module (Cont'd)

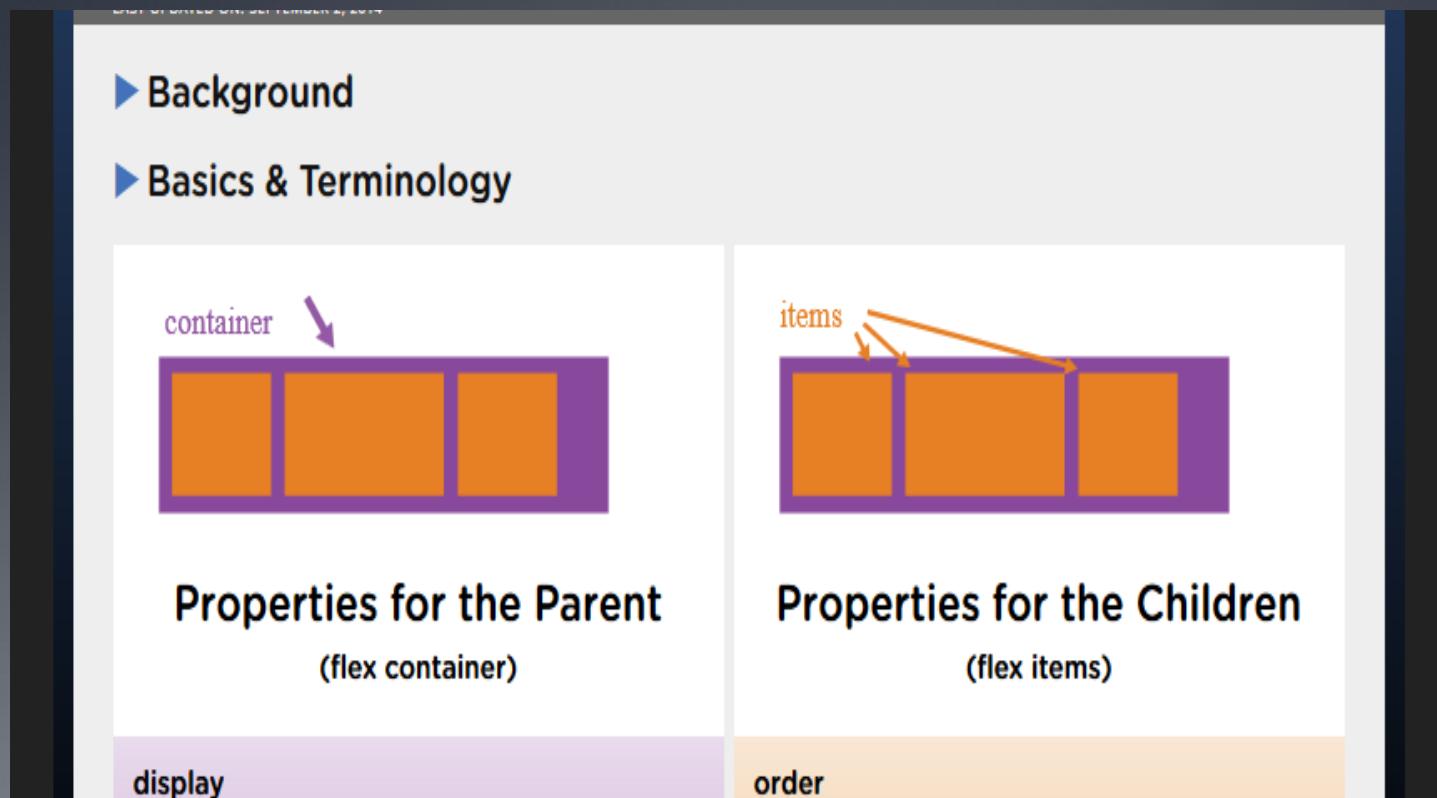
- Great way to easily configure multi-column page layout
- Elements contained within a flex container can be configured either horizontally or vertically in a flexible manner with flexible sizing
- Flexbox is not yet well-supported by browsers.
- For the current level of browser support, check

<http://caniuse.com/#search=flex>



More information about Flex

Check out: css-tricks.com/snippets/css/a-guide-to-flexbox



Browser Standards



Who's In Charge?

- HTML5 and CSS3 are really popular now, even though they aren't officially "standard"
- Who decides which features/functions get added to a browser?

Standards Bodies like the W3C

– or –

Browser engine vendors like
Mozilla, WebKit, Opera, Google, etc.?



Yes!



Actually, They Both Do (and It's a “Delicate Dance”)

- A browser vendor doesn't want to implement before the specification is finished, because that can constrain the specification.
 - Standards bodies don't want to finish specifications before people have had experience with the implementation, because they need the real-world feedback to make a specification better.
 - Philosophical differences, biases, and hidden agendas are everywhere.
 - Shipping code wins! (see <http://diveintohtml5.org/past.html>)
-



Today, browser capabilities are evolving rapidly

Where to see what new features are coming:

- Browser Engine Vendors:
 - Mozilla.org
 - Webkit.org
 - chromium.org, IE and others
- Web Standard Bodies
 - W3c – The World Wide Web Consortium
 - WHATWG - Web Hypertext Application Technology Working Group



CSS3

- CSS 2.1 is the current CSS recommendation of the W3C and is supported well by the major browsers
- CSS3 is a technology that is still in development by the browser vendors and standards bodies. Many browsers are supporting pieces of it, so we don't have to wait for W3C approval to use it on our sites.
- If you use new CSS3 features on your web pages, be sure to test your pages on older browsers to be sure that people can still access your content.



CSS3

- <http://www.w3.org/TR/css3-roadmap/>
- <http://www.w3.org/TR/css3-selectors/>
- <http://www.css3.info/>
- <http://www.w3schools.com/css3/default.asp>
- <http://caniuse.com/>



Typography

- Typography = TEXT!
- Fonts, typefaces, text families, etc.
- Two goals of typography
 - To allow the user to read your content (no kidding!)
 - Aesthetics



Serif

- Those cute little angels watching over your text!
- Times, etc.
- Easier and more efficient to read in print.

M



Sans-Serif

- Smoother, unadorned text; no serifs.
- Arial, Helvetica, etc.
- Easier and more efficient to read on-screen. Surprisingly, not so easy to read in print.

NM

Decorative



- Fancy-schmancy fonts that defy other classification.
- Comic Sans, Handwriting, etc.
- Make great logos.
- Not real legible regardless of medium.
- Use sparingly.

Mono-Spaced

- Most fonts on the computer are dynamically spaced, meaning each character gets the space it needs (incidentally, this also means you don't need 2 spaces after a period).
- Mono-spaced fonts are like a typewriter: each character gets the same amount of space.
- *Courier* is a good example.



Which font to use?

- **Sans-serif** fonts are best for navigation systems, button labels, and headings, and generally for on-screen text.
- **Serif** fonts are more readable in print.
- **Decorative** fonts are appropriate for graphic elements and a site's banner. Be careful about over-using decorative fonts, unless you know what you're doing.
- Don't use *too many* fonts on the same page – this bad habit is sometimes called “Ransom Note Publishing”



Fonts in a Web browser

- When you use the font-family property to specify fonts for your page, you're really just *suggesting* a list of fonts for the browser to use.
- If the user's machine does not have the font you suggest, then the browser will substitute the font you specified with another font.
- There are two solutions to this problem, which we'll cover later:
 - Creating an **image** that has the decorative font you want.
 - Utilizing **font embedding** to tell the browser to download the correct font (more on this a little later).



CSS3 Font Embedding

- Using the *@font-face* selector lets us *embed* fonts in our pages (bypassing the need for the user to need that font on their system)
- Some resources on this:
 - <http://www.fontsquirrel.com/>
 - <http://www.google.com/fonts>
 - <http://1001freefonts.com>
 - <http://www.dafont.com>
- Make sure you have the rights to use it!
- Use Font Squirrel's webfont generator!



Another cool thing...

- Favorites Icon (favicon)
 - Appears in bookmarks and your title bar
 - 16x16 favicon.ico file
 - Windows icon file (not just a GIF or JPEG with .ico extension)
 - Some servers will automatically utilize a favicon in any given directory. Ours doesn't! So...

```
<link rel="shortcut icon" href="favicon.ico" type="image/x-icon" />
```



And also...

- <http://www.cellcode.com/news/how-to-add-iphone-icon-to-your-website/>



HTML5 and more...

- <http://www.webplatform.org/>
- <https://developer.mozilla.org/en-US/>
- <http://www.chromeexperiments.com/>

