Designing CSS Layouts for the Flexible Web

June 4, 2009
UNC Webmasters meeting
Chapel Hill, NC
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A little about me

- Author of *Flexible Web Design: Creating Liquid and Elastic Layouts with CSS*
- Author of lynda.com video course *Web Accessibility Principles*
- Former Design Services Manager at UNC Highway Safety Research Center
- Member, Adobe Task Force of Web Standards Project (WaSP)
What is flexible design?

- Overall width is not fixed number of pixels
- Liquid (aka fluid)
- Elastic
- Hybrid
Liquid

Width adapts to viewport
Elastic

Width adapts to text size
Hybrid

Mixture of fixed-width, liquid, and/or elastic for column widths
Why not?

Why choose fixed-width when web is flexible by default?
Don’t swim upstream if you don’t have to
## Benefits of flexible layouts

<table>
<thead>
<tr>
<th>Liquid</th>
<th>Elastic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased usability, readability and accessibility</td>
<td>Increased typographic control</td>
</tr>
<tr>
<td>Respect user preferences</td>
<td></td>
</tr>
<tr>
<td>Less chance of horizontal scrollbars</td>
<td>Preserve design proportions</td>
</tr>
<tr>
<td>Take advantage of screen real estate</td>
<td></td>
</tr>
</tbody>
</table>
Design differently from the start

- Not every comp can be turned into liquid or elastic layout
- Learn which design features aren’t “flexible-friendly” and how to change them so they are
Goals of this presentation

Fixed-width designer: Make designs more adaptive to user preferences

Flexible designer: Know what to watch out for/plan for in comps to make construction easier, layout more robust

Non-designer: Identify problematic design elements to convince designer to change or tweak yourself
Not just avoiding fixed widths

No fixed heights for anything containing text
Width affects height

Liquid:
- Change in viewport width
- Text wraps differently
- Change in number of lines of text
- Change in height of block text sits in

Elastic:
- Change in font size
- Change in height of text characters
- Change in height of block text sits in
Avoid:

Irregular shapes defining a text area
Re-Introducing
THE LIPPINCOTT
This beautifully restored collection of mid-19th Century buildings in the heart of downtown Wilmington's LOGA District will be available for occupancy January 2008 - click here for leasing details.

JULY 14, 2008
Verge coworking
Is your independent business on the verge of something big? Do you like the freedom of freelancing but not the isolation of the home office? Is your current work community a group of screaming babies at Starbucks?

APRIL 18, 2008
Greener Cleaner Plus
In September 2008 Greener Cleaner Plus will open downtown's first eco-friendly dry cleaning service at the SE corner of 4th & Market. They offer free pick-up and delivery service in Wilmington and surrounding areas, and their retail location at 318 E. Market. Street will also feature chemical-free home cleaning products for counters, dishes, floors, and laundry.

GOING GREEN
The Lippincott project was conceived to take very little from the planet, and to leave a light carbon footprint behind. Come take a look at the eco-measures we put into action.

The Lippincott, www.thelippincott.net (site currently down)
Mostly Lisa, www.mostlylisa.com (since redesigned)
Example:

Closing our Retail Store Sale - 25% off all orders. Use this code to receive your discount SHOPIFY2VLQNIUD

Scrapbook Your Memories is a happy and contagious spot where the staff are as creative and as fun as it's customers. Expect more of everything:

More great products, more c... (More)
Example:

Closing our Retail Store Sale – 25% off all orders. Use this code to receive your discount SHOPIFY2VLQNIUD

Scrapbook Your Memories is a happy and contagious spot where the staff are as creative and as fun as it’s customers. Expect more of everything: More great products, more c... (More)
Are we stuck with only straight rectangles?
Solution: Tile irregular pattern

Miracles in Africa, www.miraclesinafrica.org
Irregular shapes defining a text area

Solution: Tile irregular pattern

"So don't let me give up trying, I'm beginning to receive the strength I need. To keep me on the straight and narrow..."

Straight & Narrow © S. Wiffen 2005

Simon Wiffen, www.simonwiffen.co.uk
Solution: Tile straight piece
Avoid:

Text matched with images that can’t expand
Web 2.0 experts at your service

Here at etonDIGITAL we do everything web and more. From web design and development, to interactive Flash development, and everything in between - we deliver polished, professional, and affordable products that get you the attention you deserve.

Featured projects

pod3.tv

Because everyone’s got a story to tell

Website: www.pod3.tv
We did: Design, XHTML/CSS, Drupal CMS
Pick the right images
Solution: Masked images
Solution: Masked images

Use the proper CSS to ensure text has enough space to sit in
Solution: Masked images

Anchoring the background image:

div {
    padding: 20px 20px 100px 20px;
    background: #fff url(image.jpg) no-repeat bottom left;
}
Solution: Variable cropping

CSS technique, but requires designing with right type of images
Solution: Variable cropping

**Background image:**
```html
div {
    width: 50%;
    min-height: 100px;
    background: url(image.jpg) no-repeat;
}
```

```html```
<div></div>
```

**Foreground image:**
```html
div {
    width: 50%;
    min-height: 100px;
    overflow: hidden;
}
```

```html```
<div><img src="image.jpg" width="500" height="100" alt="text"></div>
```
Solution: Variable cropping

Can stitch together multiple to make longer
Solution: Blend into background
Solution: Blend into background

Rich online functionality with Defacto: make your business fly.

Learn more about Defacto

Defacto, www.defacto-cms.com
Solution: Scalable images

CSS technique, but requires designing with right type of images

Castello di Bolgheri, www.castellodibolgheri.eu
Solution: Scalable images

Liquid image:
```
img {
    width: 50%;
}
```

Elastic image:
```
img {
    width: 20em;
}
```

Text matched with images that can’t expand

```
<img src="image.jpg" alt="text">
```
Avoid:

Fixed-width, full-width content
Personal Training

Quickly and safely achieve your fitness goals under the direct supervision of a qualified fitness professional with Roseville Health & Wellness' personal training programs. Train with some of Northern California's finest degreed and nationally certified professionals to fine-tune your fitness regiment.

Our personal trainers will help you decrease body fat, improve strength and increase coordination, flexibility and muscular balance. You'll learn the correct way to use equipment and the appropriate form and technique necessary to maximize your results.

"My successes have been numerous and wonderful, I have lost 20 lbs and many inches, I have cut my blood pressure..."

Roseville Health & Wellness Center, Personal Training page, www.rosevillehwc.com/personalTraining.php
Fixed-width, full-width content

Example:

Roseville Health & Wellness Center, www.rosevillehwc.com
Fixed-width, full-width content

Solution: Non-full-width images

Recent Work

- Odyssey Learning Systems Inc.
  XHTML / CSS
- Vancouver Comedy Fest
  Print Design
- HMA
  Print Design

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- Vancouver Comedy Fest
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  Print Design
Fixed-width, full-width content

Solution: Composite images

Ronin Snowboards, www.roninsnowboards.com (since redesigned)
Text matched with images that can’t expand

**Solution: Composite images**

```html
<div id="outer">
  <div id="inner">
    ...
  </div>
</div>

#outer {
  background: url(leftimage.png) no-repeat bottom left;
}

#inner {
  background: url(rightimage.png) no-repeat bottom right;
}
```
Solution: Scrollbars for large content

CSS technique using overflow property

Bokardo, http://bokardo.com
Solution: Scrollbars for large content

div {
  overflow: auto;
}

<div>
<img src="image.jpg" alt="text" width="600" height="400">
</div>
Summary of what to avoid:

- Irregular shapes defining a text area
- Text matched with images that can’t expand
- Fixed-width, full-width content
What’s wrong with this picture?

Beechwood Animal Shelter is a no-kill animal rescue and adoption center that works tirelessly to help rescued dogs and cats find loving adoptive parents. Find out more about us, our programs and services, and how you can help.

Another happy ending
“We adopted Bailey earlier this spring. Bailey is doing great and loves to play in the yard with our other two dogs. Everyone she meets wants to take her home. She’s very well behaved, great around children of all ages and loves giving doggie kisses.”

These are just a few of the hundreds of dogs and cats we have available for adoption right now. You can use the form at right to find your perfect pet. Please also consider fostering a pet until it can find a permanent home.
Beechwood Animal Shelter is a no-kill animal rescue and adoption center that works tirelessly to help rescued dogs and cats find loving adoptive parents. Find out more about us, our programs and services, and how you can help.

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Styx
Shorthair, black
Male, 2 years

Shelby
Yellow lab mix
Female, 6 years

Picasso
Shorthair, orange tabby
Male, 10 months

Alley
Longhair, gray
Male, 5 years

These are just a few of the hundreds of dogs and cats we have available for adoption right now. You can use the form below to find your perfect pet. Please also consider fostering a pet until it can find a permanent home.

Type:
- Dog
- Cat

Breed Type:
- Any
- Purebred
- Mixed Breed

Sex:
- Any
- Male
- Female

Length of Care:
- Adopt
- Foster

search
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**Sex:**
- Any
- Male
- Female
Learn more

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  hiding-and-revealing-portions-of-images
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Flexible design inspiration:
www.zomigi.com/blog/inspiration-for-flexible-web-design

Book:
www.flexiblewebbook.com