Designing CSS Layouts for the Flexible Web

September 10, 2008

NAGW National Conference, St. Charles, IL

Zoe Mickley Gillenwater

A little about me

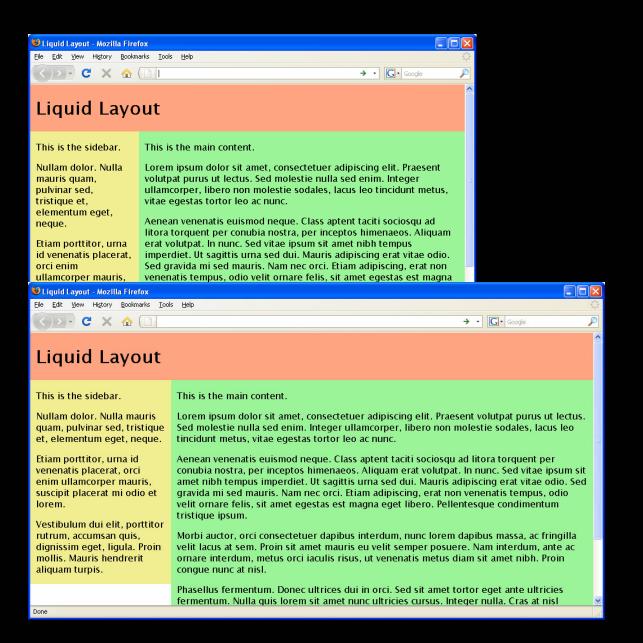
- Design Services Manager at UNC Highway Safety Research Center
- Author of upcoming Flexible Web Design: Creating Liquid and Elastic Layouts with CSS
- Author of Web Accessibility Principles for lynda.com
- Member, Adobe Task Force of Web Standards Project (WaSP)

What is flexible design?

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

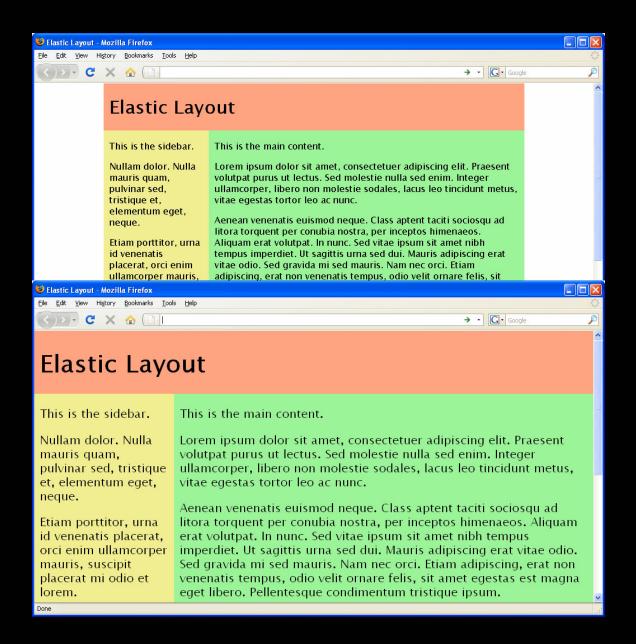
Liquid

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?

When fixed-width makes sense

- Lots of fixed-width, large content
- Known users with known setup
- Beginning designer
- Just need to get something small and simple up quickly



Benefits of flexible layouts

| Liquid | Elastic |
|--|-------------------------------|
| Increased usability, readability and accessibility | |
| Respect user preferences | |
| Less chance of horizontal scrollbars | Increased typographic control |
| Take advantage of screen real estate | Preserve design proportions |

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

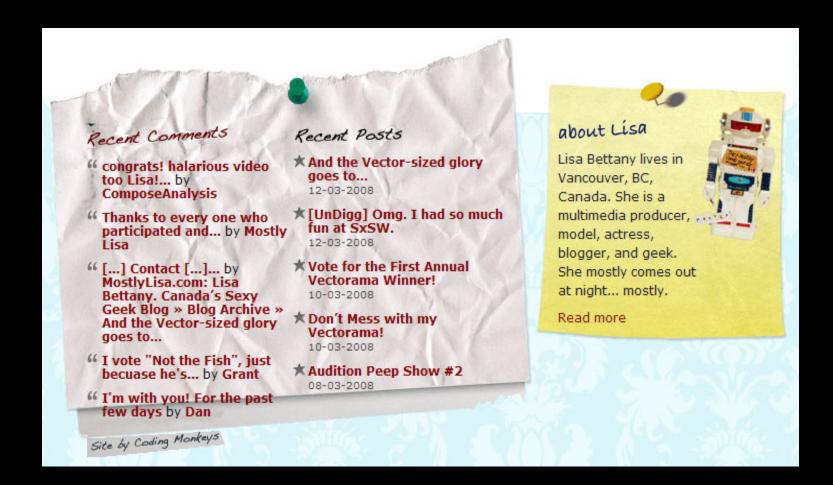


Change in height of block text sits in

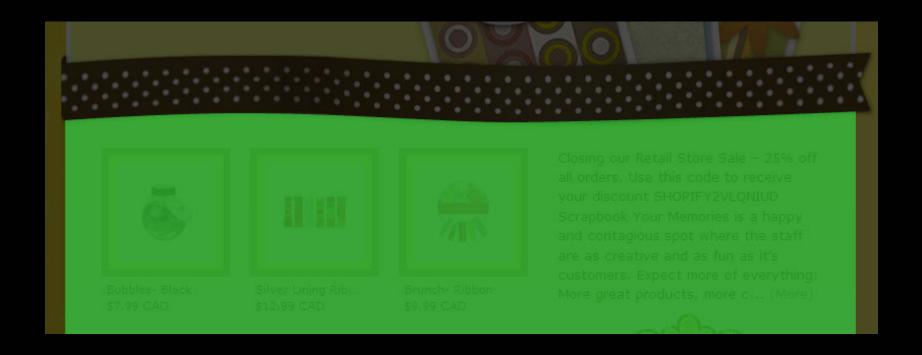
#1

Avoid:

Irregular shapes defining a text area

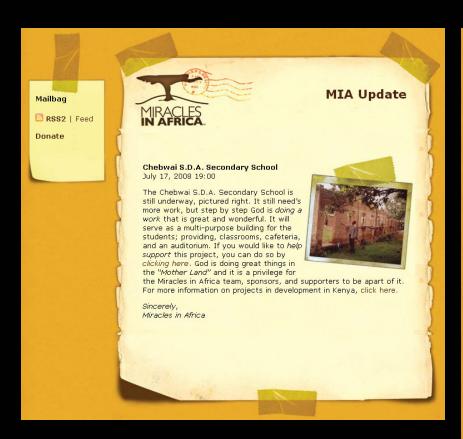








Solution: Tile irregular pattern

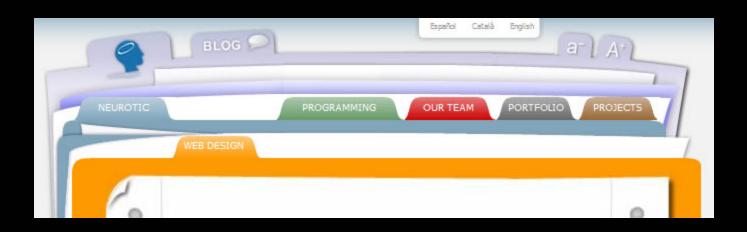


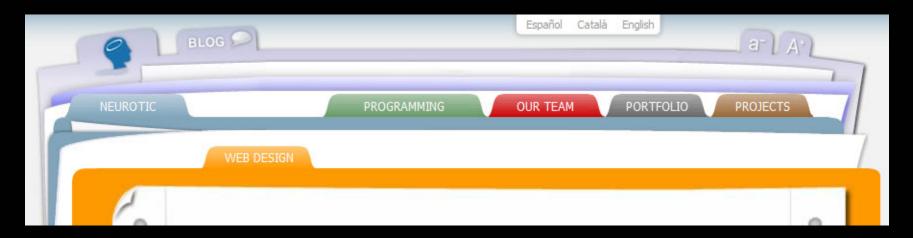


Solution: Tile irregular pattern



Solution: Tile straight piece

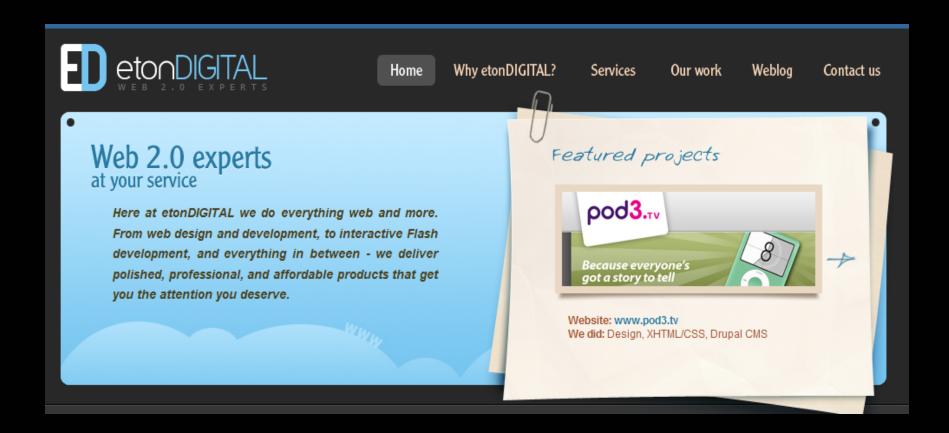




#2

Avoid:

Text matched with images that can't expand





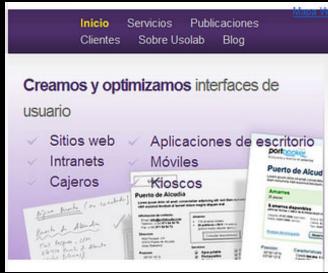
Solution: Masked images



Solution: Masked images

Use the proper CSS to ensure text has enough space to sit in





Solution: Variable cropping

CSS technique, but requires designing with right type of images





Solution: Variable cropping

Background image:

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

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

Foreground image:

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

```
<div><img src="image.jpg"
  width="500" height="100"
  alt="text"></div>
```

Solution: Variable cropping

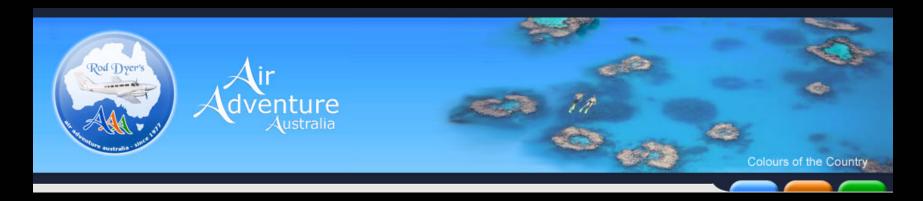
Can stitch together multiple to make longer

A-Z Index Search Support WU



Solution: Blend into background





Solution: Blend into background





Solution: Scalable images

CSS technique, but requires designing with right type of images





Solution: Scalable images

Liquid image:

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

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

Elastic image:

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

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

Avoid:



Fixed-width, full-width content

Fixed-width, full-width content

Example:





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

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Example:



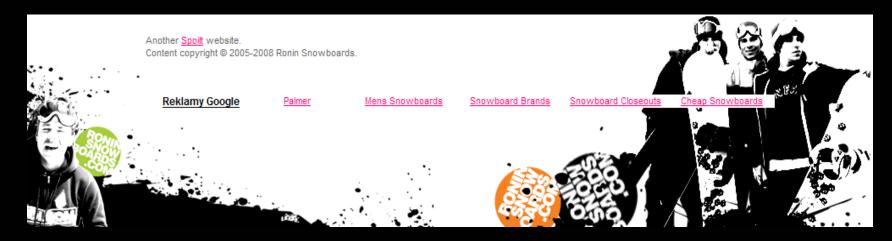
Solution: Non-full-width images





Solution: Composite images





Solution: Scrollbars for large content

CSS technique using overflow property



Porter, a web designer/developer, researcher, and writer. I live in Newburyport, MA, USA.

WHAT IS SOCIAL DESIGN?

SOCIAL DESIGN is design that focuses on the social lives of users. It deals with the activities, behaviors, and motivations of people who work and play together through software interfaces. It is built on the observation that many of the decisions we make are greatly affected by those we surround ourselves with in our social lives:

Solution: Scrollbars for large content

```
div {
    overflow: auto;
  }

<div>
<img src="image.jpg" alt="text" width="600" height="400">
</div>
```

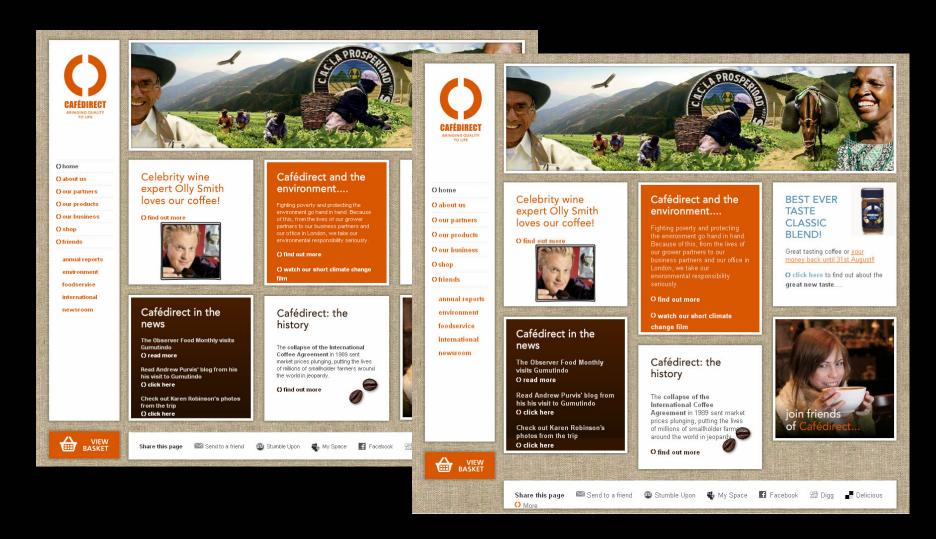
#4

Avoid:

Horizontal alignment across columns

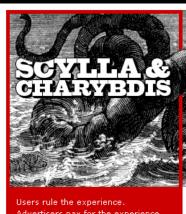
Horizontal alignment across columns

Example:



Horizontal alignment across columns

Example:



Advertisers pay for the experience. And trust me, your internal constituents are not afraid to remind each other.

Google vs. Zoho Notebook

Michael Stiso compares two web notebook heavyweights.

IN TECHNOLOGY Conversion Rate Optimization -

Part 2 Part 2 explores even more benefits of the Google Optimizer

INSTRATEGY Check Your Disciplines At

IN TECHNOLOGY

The Dark

Google Myth

the technology

behind the myth

Kevin Muller looks at

Taking a look at collaboration across disciplines.

The Door

INSTRATEGY Conversion Rate Optimization -Part 1

Java now with

added Yahoo!?

Sun is the latest to

download with a

toolbar, Good idea?

Re-thinking the

Brandon Schauer

interviews Deborah

Adler on the Clear RX

bottle design and her inspirations.

Medicine

Cabinet

hundle it's free

Frederick Towne looks at converting site visitors to buyers INSTRATEGY Abundance and

User Experience

Investing in UX

Fund, Does great UX

Jon Lax shares the

results of the UX

equal stock price

growth?

Don't let

branding kill

Damon takes a look

at brand guidelines

counteract with the

your brand

and how they

Is abundance necessary for user experience to thrive?

What Is Holding User Experience Back Where You Work?

INSTRATEGY

Richard Anderson looks at what propels the user experience

"boat" forward?

Stop Using Your Shoppers

Hit The Blue Up When we get worried about dumbing something

IN DESIGN

down, whose intelligence are we worried about insulting?

Greatness and Uniqueness Are THING OF BEAUTY

First appearing in Toshihiro Nishikado's genre-defining Space Invaders in 1978 this tinu sprite has since become sunonumous with video gaming.



Trust me on this. If audiences had an unlimited attention span, I'd be in my second term as President.

UX SNAPSHOT

Last updated 5 hours ago.

Hot topics: Marketing (23), Common

sense (17) , Human Behaviour (13) ,

Web (6) , Psychology (5) , Branding (5) Web 2.0 (3), Applications (3)

Al Gore

New Google Docs Released

Another day, another Ul update. We look at Google's decision to do "classic".

Our bitesized update. **SHORTNEWS**

Timothy Pychyl can teach you how to become a Productive Procrastinator, Pretty sure we could all use the advice.

Permalink | Read comments (1)

Obama once again goes online but this time to Fight the Smears. This is going to be interesting.

Permalink | Add comment

Start-up Viewdle has developed a services that can recognize faces in video. Will be interesting to see how this type of technology gets integrated into mainstream video services over the years. Came across it while checking out Elevator Pitches — a must visit for anyone pitching a business.

Permalink I Add comment

Mar02 The Panhandler User Experience

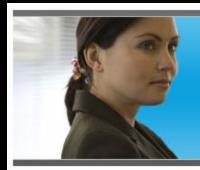
Mar01 No Business Is Perfect

New Google Analytics: First

UX Magazine, www.uxmag.com

Horizontal alignment across columns

Solution: Accept misalignment



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Bringing a world of learning to the world of work



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Discover how The
OU at work can help
you take your
professional skills
to a new level and
your career to new

Developing the skills of your employees



A well-trained workforce is a more productive workforce. So why not take a look at what The OU at work has to offer your

Sponsorship advice

Many OU Students are sponsored by their employers

Find out how

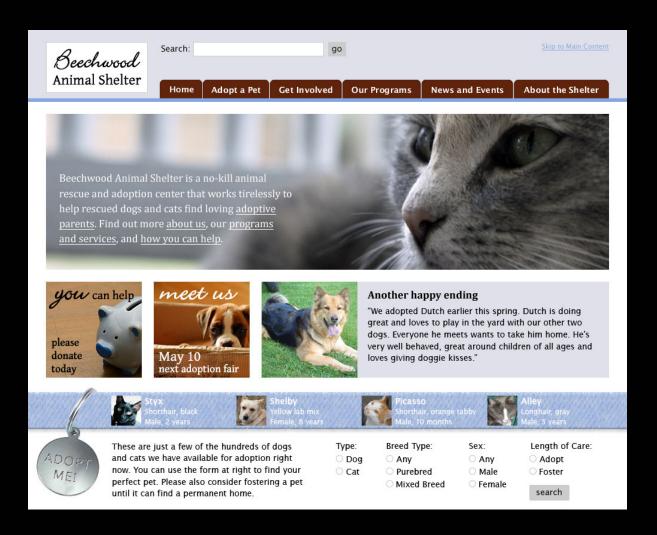
Why distance learning works at work

Alumni click here

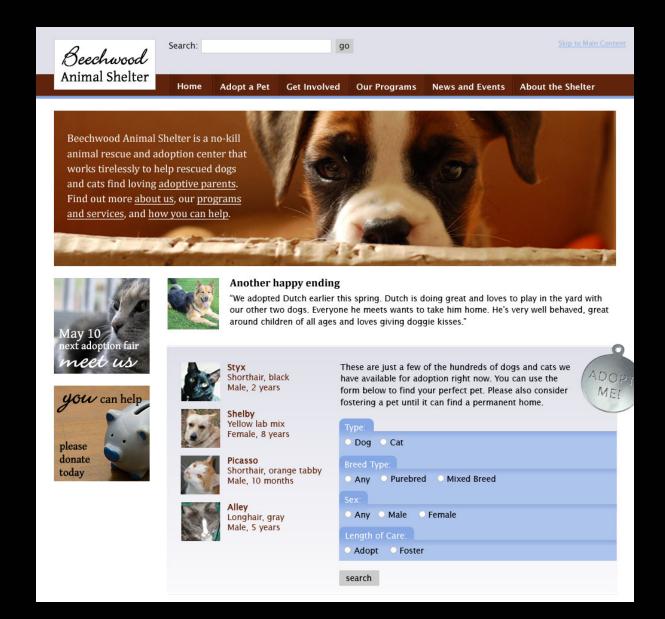
Summary of what to avoid:

- Irregular shapes defining a text area
- Text matched with images that can't expand
- Fixed-width, full-width content
- Horizontal alignment across columns

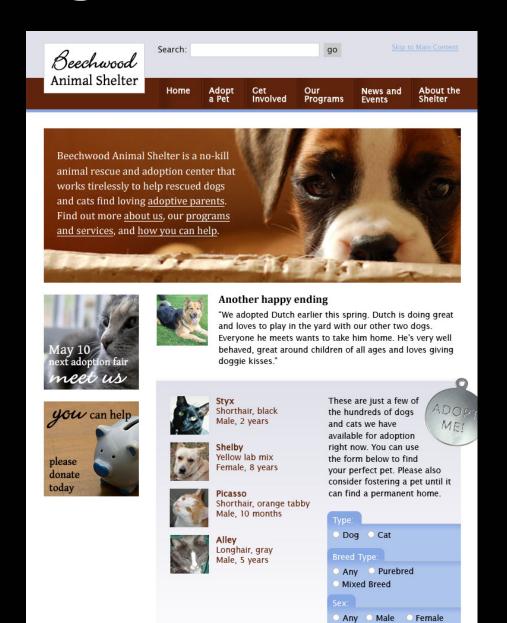
What's wrong with this picture?



A more flexible-friendly version



How it might look narrower



Flexible design inspiration

www.zomigi.com/blog/inspiration-for-flexible-web-design

Questions?

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