Mobile has shifted the landscape
Mobile has shifted the landscape. It's changed how we work.
In the next 30 minutes ...

How RWD changed our workflow

The need for speed

Responsive Frameworks

UI Design Patterns
Collaboration is key in an RWD World
“Design in the absence of content is not design... its decoration.

-Zeldman
“A website with a nice design and poor content is like a restaurant with great ambiance but they don’t serve food.”

-Jeremy
Discovery Phase

Client defines goals for the site (2-3)

Collaborate on a site taxonomy

Client develops the content
Can’t we just move the content over as-is and rework it later?

-Client
YOU CAN'T
“Design is fun. Writing content is hard.”

-Me
Design Phase

90% of our projects don’t have a Photoshop phase...

(but some do)
Design Phase

Design rough comp once in Photoshop
• Desktop and maybe mobile view

Review comp with client to get sign off

Clients only care about home page
UC San Diego
UNDERGRADUATE ADMISSIONS

WE'VE GOT YOU COVERED
WITH OVER 100 AVAILABLE MAJORS

TAKE A CAMPUS TOUR

TAKE A VIRTUAL TOUR
Development Phase

Complete HTML/CSS prototype

Cross browser and device testing

Bug fixes and design iterations (small cycles)
Log the issues
Development Phase

Build any custom content types into the CMS

WE load the content into the CMS

Add metadata

Test
Training Phase

Before launch we train the users in the CMS

Starting to train on RWD do’s and don’ts

We assist as needed with questions or problems
Use Trello to manage projects
The need for speed
Survey of 106 responsive sites

64 of them were less than 10% smaller than desktop

26 were larger than the desktop equivalent

Source: Jason Grigsby
Users expect sites to load in 2 seconds or less.
Graceful Degradation
@media screen and (max-width; 480px

Progressive Enhancement
@media screen and (min-width; 480px)
Mobile First Philosophy

Start with the essential elements for small screens

Starting at lowest denominator gets you to think twice about what you add

Content comes first
Mobile first is hard

Most of our stuff isn’t designed this way

Ontouch not onclick

Swipes
Mobile first & old browsers

Older versions of IE will be served the mobile RWD layout with mobile first

Can use polyfills to make old IE responsive (performance hit)

Conditional IE stylesheets are a good approach
Frameworks can help speed RWD development
Two Basic Types

1. Grid layout framework

2. Grid layout framework + UI Library
Grid framework only

Responsive skeleton
Normalizing CSS
Polyfills for older browsers
Grid framework + UI Libraries
# Responsive CSS Framework Comparison

**Bootstrap vs. Foundation vs. Skeleton**

@vermiliondesign — Read the blog post

---

## Overview

<table>
<thead>
<tr>
<th></th>
<th>Bootstrap 3 (NEW)</th>
<th>Bootstrap 2</th>
<th>Foundation v4</th>
<th>Foundation v3</th>
<th>Skeleton</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary</strong></td>
<td>Large user base</td>
<td>Large user base</td>
<td>Medium user base</td>
<td>Medium user base</td>
<td>Medium user base</td>
</tr>
<tr>
<td></td>
<td>UI tools: Lots of widgets; good for rapid prototyping</td>
<td>UI tools: Lots of widgets; good for rapid prototyping</td>
<td>UI tools: Powerful and modular set of tools. More style agnostic than Bootstrap.</td>
<td>UI tools: Good for rapid prototyping, but not as expansive as Bootstrap.</td>
<td>UI tools: Limited</td>
</tr>
<tr>
<td></td>
<td>History: Mobile-first update to the style guide for internal tools</td>
<td>History: Built by Twitter as a style guide for internal tools</td>
<td>History: Mobile-first update to the boilerplate developed by ZURB for client projects</td>
<td>History: Built by ZURB as boilerplate for client projects</td>
<td>History: Style agnostic and intentionally lightweight</td>
</tr>
<tr>
<td><strong>Version</strong></td>
<td>3</td>
<td>2.3.2</td>
<td>4.3</td>
<td>3.2.5</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Website</strong></td>
<td>getbootstrap.com</td>
<td>getbootstrap.com/2.3.2</td>
<td>foundation.zurb.com</td>
<td>foundation.zurb.com/</td>
<td>getskeleton.com</td>
</tr>
</tbody>
</table>
RWD design considerations & trends
Bootstrap

Sleek, intuitive, and powerful mobile first front-end framework for faster and easier web development.

Download Bootstrap
Bootstrap

Sleek, intuitive, and powerful mobile first front-end framework for faster and easier web development.

Download Bootstrap

Developing with Augmented Reality?
Register Here to Download the Vuforia SDK
ads via Carbon

Currently v3.0.0   Bootstrap 2.3.2 docs   GitHub project   Examples   Expo
Bootstrap

Getting started

CSS

Components

JavaScript

Customize

Download Bootstrap

Developing with Augmented Reality?
Register Here to
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SDK

ads via Carbon

Star 59,258  Fork 20,584  Follow @twbootstrap 94.4K followers  Tweet 2,869

Currently v3.0.0  Bootstrap 2.3.2 docs  GitHub project  Examples  Expo
News

Dedication marks completion of Center for Care and Discovery

MLK Celebration to feature civil rights activist Judy Richardson

Latest News

Gov. Quinn joins officials to mark completion of Center for Care and Discovery

Webcast at 7pm today: Institute of Politics hosts gun policy panel

Diplomatic Encounter Series: Consul General Roey Gilad
5:30–7:00 p.m.
International House, Assembly Hall
Wed., Jan. 16
Implementing Off-Canvas Navigation For A Responsive Website

By David Bushell

January 15th, 2013  Responsive Web Design  16 Comments

The varying viewports that our websites encounter on a daily basis continue to demand more from responsive design. Not only must we continue to tackle the issues of content choreography — the art of maintaining order and context throughout the chaotic ebb and flow of the Web browser — but we must also meet the expectations of users.
IMPLEMENTATION & RWD

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They're not sitting still. With the likes of Firefox OS (Boot to Gecko), Chrome OS and now Android L Ice Cream Sandwich, we must have an eye on the future and move to the next generation of mobile devices...
The varying viewports that our websites encounter on a daily basis continue to demand more from responsive design. Not only must we continue to tackle the issues of content choreography — the art of maintaining order and context throughout the chaotic ebb and flow of the Web browser — but we must also meet the expectations of users.
“Together, we will build on the university’s success, and the leadership of our former Chancellors, and we will continue to shape and impact the world, addressing local, national and global challenges.”

Students Participate in the Strategic Planning Process

January 9, 2013

Approximately 175 students attended a Town Hall meeting on Jan. 8.
China or Russia Could Be Behind This Global Online Espionage Operation

Russia or China could be behind one of the largest and most complex cyber espionage campaigns ever revealed, according to cybersecurity experts contacted by Mashable. The operation, codenamed Red October, was uncovered yesterday by the Russian online...
China’s Pollution Is So Bad You Can See Smog From Space

Air pollution over Beijing and other parts of eastern China shattered the air quality scales over the weekend, hitting 755 out of 500 (500 being bad) on the U.S. Environmental Protection Agency’s standards. The smog was really awful on the ground, wi...

9 SHARES / 20 minutes ago

NCR Teams With Paypal to Enhance Mobile Payments System

Point-of-sale giant NCR and Paypal are teaming up to make life a little easier for restaurant-goers. The two companies announced an agreement on Tuesday that will bring the option to pay with Paypal on NCR’s recently announced mobile payment app. In ...

86 SHARES / 41 minutes ago

Bad Lip Readings Give NFL Games a Hilarious New Soundtrack

The overdubs look real, but you’d never catch NFL players saying the lines in these hilariously bad lip readings.

144 SHARES / 42 minutes ago
LA councilman proposes new gun control measure

ALICE WALTON | 06:14 PM

Councilman Paul Krekorian wants the city of Los Angeles to ban possession of high-capacity magazines. The manufacturing and sale of them are already prohibited.

10 best posts from Arnold Schwarzenegger's Reddit AMA

MIKE ROE | 02:45 PM

“Former Mr. Olympia, Conan, Terminator, and Governor of California. I killed the Predator.” That’s how our former governor introduced himself as he took to Reddit.

UPDATED: Hundreds honor Huell Howser (Video, photos)

Kevin Ferguson and Mike Roe | 04:01 PM

Los Angeles City Councilman Tom LaBonge is hosting a public memorial for the late "California's Gold" TV host Huell Howser at the Griffith Observatory.
LA councilman proposes new gun control measure

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Facebook 'Graph Search' knows all about you, here's what you need to know about it

LISA BRENNER | 02:40 PM

Facebook "Graph Search" sources your network for precision results, sparing you the hassle of asking everyone you know about what you'd like to know.
Hack Design: Free design courses for developers, sent to your inbox every week

Check out Hack Design, a design course built specifically for hackers, featuring lessons from Enrique Allen, Kerem Suer and Luke Beard.
Hack Design: Free design courses for developers, sent to your inbox every week

Check out Hack Design, a design course built specifically for hackers, featuring lessons from Enrique Allen, Kerem Suer and Luke Beard.
Combination
Student Town Halls with Chancellor to Be Held to Discuss Strategic Plan

Students are invited to a Student Town Hall with the chancellor at 5 p.m., Tuesday, Jan. 8 in Price Center Ballroom B. This is your chance to give the chancellor input on the strategic plan for UC San Diego. Refreshments will be served. The second Student Town Hall will be held at 4 p.m., Thursday, Jan. 10 in the Student Services Center Multipurpose Room.
Stacking Navigation
Stacking Navigation
Education and Social Justice

This new PhD enables experienced professionals worldwide to focus on, and research, social justice issues that are at the heart of their own professional practice and concerns.

Learn More

Latest News

28 January 2013

Cranfield advises Zambian farmers on food crisis
Campus Web CMS

The campus offers a Web content management tool to manage your UC San Diego Web site. The advantages of using the campus CMS are:

- It allows people with little or no experience to build and maintain professional Web sites, using the campus templates.
- It creates a more coherent Web presence across the UC San Diego Web space.
- We’ll help you migrate your website and teach you how to use the system.
- It’s free for campus units.

What are the prerequisites?
1. Your site must be permanent. One-time events, notices, and other temporary items should be advertised on an existing website.
2. You (or someone is your area) is committed to owning and updating the website on a regular basis.
3. You agree to use the standard campus-wide templates.

What product is the campus using?
Based on extensive analysis, we’ve chosen to use Hannon Hill Cascade Server.

Who can use the CMS?
The CMS is available to UCSD Academic & Administrative units. At this time, we cannot support labs, student organizations, or Health Sciences sites.

- Health Sciences clients can find information on branding and templates on the Health Sciences Branding site.
- ACMS provides websites for student organizations.
- ACMS also provides web development on a recharge basis for UCSD clients.

What is the cost for clients?
The Campus Web CMS is free. The system and services are funded by Administrative Computing & Telecommunications (ACT).

Next steps
1. Review the Web CMS Service Level Agreement (SLA).
2. Decide if you are comfortable with the design templates.
3. Schedule a 30 minute demo and consultation to determine if the campus CMS is right for you.
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Campus Web Office
- About Us
  - Campus CMS
    - What's in it for you?
    - CMS Capabilities
    - CMS Clients
    - Prerequisites
    - Process
    - Basic Features
    - Content Templates
    - Design Guidelines
    - Navigation Elements
    - Application Decorator
    - Security & Roles
    - Website Hosting
    - Hosting Your Own Website
    - Search
    - Analytics
    - Technical Support
    - Service Level Agreement
    - Frequently Asked Questions
- Training
- HTML Web Templates
- Mobile Web
- Web Development Resources
Linking to your m.university.edu site from your responsive site
Skylar Diggins
Her Notre Dame Experience

ABOUT
ADMISSIONS

ACADEMICS
FAITH & SERVICE

Video: The Senior Thesis: Independent Research, Student-Inspired

Notre Dame’s network of 267 alumni clubs is the most extensive in higher education

Latest News & Events

University News
Featured Stories

Leagues of Their Own
1,500 students participate in at least one of 50 club sports, from traditional to quirky

Hollywood Goes to College
Burkle Center and United Nations to urge filmmakers to shine more light on global issues

Jeans Too Tight? Blame Your Genes
Now it’s been proven: It’s not just what you eat that expands your waistline

Newsroom

Happenings

Connect with UCLA
Featured Stories

Leagues of Their Own
1,500 students participate in at least one of 50 club sports, from traditional to quirky

Hollywood Goes to College
Burkle Center and United Nations to urge filmmakers to shine more light on global issues

Jeans Too Tight? Blame Your Genes
Now it's been proven: It's not just what you eat that expands your waistline

Newsroom
Responsive Patterns

A collection of patterns and modules for responsive designs.

Layout

<table>
<thead>
<tr>
<th>Reflowing Layouts</th>
<th>Equal Width</th>
<th>Off Canvas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly Fluid</td>
<td>2 equal-width columns</td>
<td>Top</td>
</tr>
<tr>
<td>Column Drop</td>
<td>3 equal-width columns</td>
<td>Left</td>
</tr>
<tr>
<td>Layout Shifter</td>
<td>4 equal-width columns</td>
<td>Right</td>
</tr>
<tr>
<td>Tiny Tweaks</td>
<td>5 equal-width columns</td>
<td>Left and Right</td>
</tr>
<tr>
<td>Main column with sidebar</td>
<td>6 equal-width columns</td>
<td>Bottom</td>
</tr>
<tr>
<td>3 column</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 column v2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source-Order Shift                       Lists                                          Grid Block
Multi-Device Layout Patterns

by Luke Wroblewski

Through fluid grids and media query adjustments, responsive design enables Web page layouts to adapt to a variety of screen sizes. As more designers embrace this technique, we're not only seeing a lot of innovation but the emergence of clear patterns as well. I cataloged what seem to be the most popular of these patterns for adaptable multi-device layouts.

To get a sense of emerging responsive design layout patterns, I combed through all the examples curated on the Media Queries gallery site several times. I looked for what high-level patterns showed up most frequently and tried to avoid defining separate patterns where there were only small differences.

**Mostly Fluid**

The most popular pattern was perhaps surprisingly simple: a multi-column layout that introduces larger margins on big screens, relies on fluid grids and images to scale from large screens down to small screen sizes, and stacks columns vertically in its narrowest incarnations (illustrated below).
Responsive widgets
FlexSlider 2
The best responsive slider. Period.

Responsive image rotator

```javascript
// Can also be used with $(document).ready()
$(window).load(function() {
    $('.flexslider').flexslider({
        animation: "slide"
    });
});
```
Responsive video resizer

A lightweight, easy-to-use jQuery plugin for fluid width video embeds.
FitText

A jQuery plugin for inflating web type

Download on Github

FitText makes font-sizes flexible. Use this plugin on your fluid or responsive layout to achieve scalable headlines that fill the width of a parent element.
Inspiration
HigherEd RWD Directory

This is a non-exhaustive list of Responsive (including Hybrid and Adaptive) HigherEd homepages (no department or sub sites). If you know of any that are missing from the list, please let me know. Thanks to Doug Gapinski for assisting in starting the list. Updated 2013-10-05.

A

- Adams State University
- Alaska Fairbanks, University of *Adaptive
- Allegheny College
- American University of Paris, The
- Amherst College
- Ancilla College
- Arkansas State University
- A.T. Still University

B

- Bacone College *Adaptive
- Baptist Missionary Association
- Bedfordshire, University of
- Beloit College
- Binghamton University
- Briar Cliff University
- Bridgewater College
- British Columbia, The University of *Hybrid
Make templates available