Responsive Web Design

John Pilbeam
Digital Engineer, IT Strategy & Development
Bodleian Digital Library Systems & Services
The Bodleian Libraries
Introduction

• What (is Responsive Web Design)?
• Why (should I use it)?
• Examples of websites
• Examples of Grid Systems, Frameworks & Themes
• Further reading & listening
What (is Responsive Web Design)?

Responsive Web Design, by Ethan Marcotte
May 25, 2010
http://alistapart.com/article/responsive-web-design
“The control which designers know in the print medium, and often desire in the web medium, is simply a function of the limitation of the printed page. We should embrace the fact that the web doesn’t have the same constraints, and design for this flexibility. But first, we must ‘accept the ebb and flow of things.’”

John Allsopp, “A Dao of Web Design”, April 07, 2000
http://alistapart.com/article/dao
“Three Core Ingredients”

- Flexible grid-based layout
- Flexible images and media
- Media queries (CSS3)
Flexible grids

Senators Reach Bipartisan Deal on Checks of Gun Buyers

WASHINGTON — A bipartisan collection of senators on Wednesday announced a compromise measure to expand background checks for gun buyers, increasing the chances that a viable package of new gun safety laws will soon hit the Senate floor.

Senators Joe Manchin III, Democrat of West Virginia, and Patrick J. Toomey, Republican of Pennsylvania, have spearheaded the deal.

Under the terms of the agreement, background checks for gun buyers would expand to gun shows and online sales — a huge portion of gun sales that are made without the background checks used by gun stores — and it would maintain record-keeping provisions that law enforcement officials find essential in tracking criminal gun use, but that gun rights groups find anathema.

The bill would also modify the current measure, which will receive a procedural vote on Thursday, in other key ways. For example, the background checks provision would extend to fewer gun buyers than many gun control groups — and some Democrats in the Senate — would like. Sales between family members, for instance,
Flexible images and media
CSS media queries

@media (min-width:768px) and (max-width:1200px) and (orientation:portrait) { ... }

http://www.w3.org/TR/css3-mediaqueries/#media1
CSS media queries

- Support
  - Firefox 3.5+
  - WebKit browsers (Safari 3+, Android)
  - Internet Explorer 9+
- Javascript solutions for older browsers
  - css3-mediaqueries.js
  - respond.js
Why (should I use it)?

- Mobile = 40% of Guardian website users
- Increasing (most websites reporting between 15%-50% mobile)
  @TomGrinsted

http://www.slideshare.net/museumscomputergroup/coping-with-rapidly-changing-digital-audiences-or-theres-no-such-thing-as-the-digital-consumer
Why (should I use it)?

- BBC: Spike in mobile use post Christmas 2012 (iPads and Nexus 7s...)
- “~80 significant browsers / operating system combinations”
  - @tmaslen
Why (should I use it)?

- Also bigger screens:
  - ‘Retina’ and ‘Pixel’ displays
  - TVs and consoles
Why (should I use it)?

Image credit: Brad Frost @brad_frost
Why (should I use it)?

https://twitter.com/anna_debenham/status/314056959005429760
Why (should I use it)?

- Test your own site(s):
  - Responsive Design Bookmarklet
    http://responsive.victorcoulon.fr
  - Responsive.is
    http://responsive.is
  - Aptus (OS X app)
  - BrowserStack
    http://www.browserstack.com/
Examples of websites

https://www.rijksmuseum.nl
Examples of websites

http://www.surrey.ac.uk/
Examples of websites

http://stuffandnonsense.co.uk/projects/320andup/
Grid Systems

- Unsemantic fluid grid system / CSS framework
  http://unsemantic.com/

- Golden Grid System
  http://goldengridsystem.com/

- The Goldilocks Approach
  http://goldilocksapproach.com/
UI Frameworks

- Twitter Bootstrap
  http://twitter.github.io/bootstrap/
- ZURB Foundation
  http://foundation.zurb.com/
ZURB Foundation

The Grid
Flexible, efficient layout.

1 2 3 4 5 6 7 8 9 10 11 12

Header in twelve columns

Main content in three columns

Sidebar

Flexible, efficient layout.

Open "http://foundation.zurb.com/grid.php" in a new tab
Block Grid

Block grids give you a way to evenly split contents of a list within the grid. If you wanted to create a row of 5 images or paragraphs that need to stay evenly spaced no matter the screen size, the block grid is for you.
Flex Video

If you’re embedding a video from YouTube, Vimeo, or another site that uses iframe, embed or object elements, you can wrap your video in `div.flex-video` to create an intrinsic ratio that will properly scale your video on any device.

4:3 is the default size for the `.flex-video` element, and the assumption for `.flex-video` for chrome (controls) height is based on YouTube.
Themes

- Drupal - ZURB Foundation 4 theme, many responsive themes
- Plone - Responsive Diazo
Further reading & listening

- Responsive Web Design by Ethan Marcotte
  http://www.abookapart.com/products/responsive-web-design
Further reading & listening

- Mobile First by Luke Wroblewski
  http://www.abookapart.com/products/mobile-first
Further reading & listening

- Responsive Day Out, Friday, 1 March 2013
  The Corn Exchange, Brighton, England
  - http://responsiveconf.com/
Further reading & listening

- Twitter
  - Ethan Marcotte (@beep) @RWD
Thanks & Acknowledgements

• @tomgrinsted - Guardian Mobile slides
• @garrettc - UX Oxford talk
  https://pinboard.in/u:garrettc/t:uxoxford2012/
• @monicams - Responsive Day Out notes
  http://monicams.com/blog/responsive-day-out/
• @djlittle - Example websites
Questions?

john.pilbeam@bodleian.ox.ac.uk

@jpilbeam