**Nurun Research Report**

**Title: Responsive Design Resource Guide**

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**Date: 12/7/2012**

**Description of Research:**

Discovery, documentation and resource guide for Responsive Web Design (RWD). The Resource Guide pertains to RWD workflow, process, design, and user experience / user interface design techniques and thoughts. The intent is to build a resource guide for both Assurant Solutions and for future Responsive Design projects.

**Audience:**

UX best practices, Strategy, Development, Social Media, Design, Program Management, Account, Workflow, Process

**Summary of Findings:**

Responsive design is a very experimental, nascent field and people are still experimenting and trying to understand the process of managing, designing for, and producing RWD sites. RWD sites currently make sense for simple sites like blogs, but larger, content-heavy sites still struggle to properly implement RWD. This resource guide talks about anything from design to development to process workflow, in order to help audiences new to RWD to understand what it exactly is, the benefits and drawbacks of RWD, and where the field of RWD is going. This document will also help the reader understand how to start their first RWD project.

**Potential uses for Nurun:**

**5:** Very useful for the next Responsive Web Design project. Useful for anyone related to the project to read.

**Links/References:**

Live Resource Guide can be found here:

J:\UX-IA Projects\\_responsive\responsivejumpstart.txt

Complete report below. Word messed up the formatting. Use the live link for more up to date and well-formatted material

Responsive Design Jumpstart

Responsive Design Basics

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The term "responsive design" is a fairly new and somewhat ambiguous. It was coined and introduced to the world by a guy named Ethan Marcotte back in 2010. Here is the article that started it all:

http://www.alistapart.com/articles/responsive-web-design/

He argued for a new philosophy in web design that "responded" to the environment used to view the web site, including:

- screen size (desktop, tablet, mobile, large TV...)

- connection speed (3G, DSL, fiber optic...)

- input type (touch, mouse/keyboard, screen readers)

Technically speaking, for a site to be "responsive," they need:

1. Fluid Grid / Content

2. Fluid images

3. Media Queries

- fluid grid or content means that within one layout, the content moves shrinks or grows (but does not re-layout) to the size of the browser

- example of a fluid grid: http://grids.heroku.com/fluid\_grid?column\_amount=12

- example of a fixed grid: http://grids.heroku.com/grid?column\_width=60&column\_amount=12&gutter\_width=20

- fluid images are images that resize in shape and filesize depending on the device

- media queries is a CSS syntax that allows a website to show an entirely different layout, based on width of the browser. (It does NOT detect for the type of device)

You'll hear a lot about "mobile first" or "content first" design. This means that before doing the layout of the site, the designer needs to determine the hierarchy of all the page components- what's more important than something else. That's the core of "responsive" design

To build your own, you can either start from scratch or use a framework. Frameworks take a lot of the work out of writing a responsive website, and there are tons.

ALSO, keep in mind that a responsive site is not always the best solution.

Use Responsive if the content and user goals are similar between a mobile and a desktop user (ex: blog, news, info sites)

Use Mobile site if there are very different user goals (mobile banking, location-finding)

Read away... (though read them critically)

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- Intro Articles

Rethinking the Mobile Web http://www.slideshare.net/bryanrieger/rethinking-the-mobile-web-by-yiibu

Thoughts on Responsive http://blog.bridgelinedigital.com/content\_management/responsive-design-what-is-it-and-why-is-it-so-important/

Beginner's Guide http://blog.teamtreehouse.com/beginners-guide-to-responsive-web-design

Smashing Intro http://coding.smashingmagazine.com/2012/03/22/device-agnostic-approach-to-responsive-web-design/

Resource Guide http://mobile.smashingmagazine.com/2011/07/22/responsive-web-design-techniques-tools-and-design-strategies/

Guidelines http://coding.smashingmagazine.com/2011/01/12/guidelines-for-responsive-web-design/

Reading List http://www.webdesignerdepot.com/2011/09/the-ultimate-responsive-web-design-roundup/

Content First http://adactio.com/journal/4523/

Content Choreography http://trentwalton.com/2011/07/14/content-choreography/

Responsive Workflow http://www.lukew.com/ff/entry.asp?1617

Responsive Workflow http://viljamis.com/blog/2012/responsive-workflow/

Workflow Process http://responsiveprocess.com/

Workflow Workflow http://bradfrostweb.com/blog/mobile/bdconf-stephen-hay-presents-responsive-design-workflow/

- Design

Device Breakpoints http://www.metaltoad.com/blog/simple-device-diagram-responsive-design-planning

Layout Patterns http://www.lukew.com/ff/entry.asp?1514

Navigation Patterns http://bradfrostweb.com/blog/web/responsive-nav-patterns/

Complex Nav Patterns http://bradfrostweb.com/blog/web/complex-navigation-patterns-for-responsive-design/#skip-subnav

Fluid Grid Design http://www.alistapart.com/articles/fluidgrids

Breakpoints http://www.tangledindesign.com/blog/deciding-what-responsive-breakpoints-to-use

UMich Case Study http://palantir.net/blog/scalable-navigation-patterns-responsive-web-design

- Fluid / Adaptive Images

http://24ways.org/2011/adaptive-images-for-responsive-designs/

http://24ways.org/2011/adaptive-images-for-responsive-designs-again/

http://filamentgroup.com/lab/responsive\_images\_experimenting\_with\_context\_aware\_image\_sizing

http://demo.solemone.de/overflow-image-with-vertical-centering-for-responsive-web-design/

http://www.w3.org/community/respimg/2012/03/15/polyfilling-picture-without-the-overhead/

- Tutorials

Basics http://appglobe.com/responsive-web-design-basics/

Detailed Tutorial http://www.netmagazine.com/tutorials/build-responsive-site-week-designing-responsively-part-1

Responsive Menu http://www.onextrapixel.com/2012/08/27/creating-a-css3-responsive-menu/

Fluid Layout http://www.netmagazine.com/tutorials/create-fluid-layouts-html5-and-css3

Mobile Device Design http://wegraphics.net/blog/tutorials/mobile-web-mastery-25-tips-on-designing-for-mobile-devices/

Avoiding RWD Problems http://www.netmagazine.com/features/top-responsive-web-design-problems-and-how-avoid-them

Navigation Tricks http://webdesign.tutsplus.com/tutorials/htmlcss-tutorials/a-simple-responsive-mobile-first-navigation/

Grid-Based Design http://www.smashingmagazine.com/2007/04/14/designing-with-grid-based-approach/

- Technical Tutorials

Conditional Loading http://24ways.org/2011/conditional-loading-for-responsive-designs/

Delayed Content http://24ways.org/2010/speed-up-your-site-with-delayed-content/

Degradation & Compatibility http://coding.smashingmagazine.com/2011/08/10/techniques-for-gracefully-degrading-media-queries/

Content Folding http://jsfiddle.net/ympKa/embedded/result/

Examples

Massive list http://www.mediaqueri.es

http://www.bostonglobe.com

http://themetrust.com/demos/hero/

http://themetrust.com/demos/clean/

http://anderssonwise.com/

http://www.thismanslife.co.uk/projects/lab/responsivewireframes/#desktop

http://bryanconnor.com/work.html

http://seesparkbox.com/

http://www.gravitatedesign.com

http://rodrigob.com/themes/viewpoint/

http://staffanstorp.se/

http://stephencaver.com/

http://orderedlist.com/

Responsive Design Tools

Lots of Tools http://www.onextrapixel.com/2012/06/13/really-useful-resources-and-tools-for-responsive-web-design/

Even More Tools http://www.netmagazine.com/features/50-fantastic-tools-responsive-web-design

SASS / SCSS http://sass-lang.com/

Responsivepx Test Tool http://responsivepx.com/

Google PageSpeed https://developers.google.com/speed/

Simple Frameworks

frameless grid

golden grid

320 and up

Column-Grid Systems

Skeleton

twitter bootstrap

foundation

JS Tools

JQuery Tools List http://www.jquery4u.com/page-layout/30-jquery-responsive-layout-plugins/#.UFzOc41lR9U

http://rwdcalc.com/

http://gridinator.com/

http://gridpak.com/

http://isotope.metafizzy.co/index.html

http://masonry.desandro.com/

http://csswizardry.com/fluid-grids/

http://www.woothemes.com/flexslider/

http://tinynav.viljamis.com/

Carousels http://coolcarousels.frebsite.nl/