Building Websites for Multiple Platforms

Websites for the Desktop, Tablet, and Smart Phone

As more and more users come on board with using the likes of tablets and smart phones alongside the "traditional" desktop, businesses and visitors will be demanding that websites are viewable via different screen sizes. Generally the size falls into 3 categories, Desktop/TV (769px plus), Tablets (321px – 768px), and smart devices (up to 320px).

As a business owner you should be requesting that your website is viewable across different platforms, and as a web developer you should be advising clients the need for this and how having/not having this will impact their business. Of course one could argue that the majority of visitors are coming via the desktop browser, but one must understand that smart phones device sales will outpace desktop sales in the next couple of years.

Before you jump at the opportunity of revamping your site for multiple platforms, first check if your websites displays correctly on smart devices. You may want to test it via your cell phone, Adobe's Device Central software, or a number of free tools available, as below:

- iBBDemo2 — This Adobe Air app will let you see content as it would appear on the iPad and iPhone.
- Android SDK — The Android SDK comes with its own device emulator so you can see how websites will appear on Android handsets.
- Blackberry Web Development Page — Here you are given a series of BlackBerry simulators and includes tips for designing for BlackBerry devices.

Of course it's difficult to build a website for each particular device; hence research is required in terms of visitor base and the types of devices being used.

Media Queries

Media Queries are an ideal way of customizing style sheets based on screen sizes, following examples represent the style sheets that will be identified for a traditional screen, Tablet, and phone device.

```
<link rel="stylesheet" type="text/css" href="styles.css"/>

<link href="Tablet.css/tablet.css" rel="stylesheet" type="text/css" media="only
screen and (min-width: 321px) and (max-width: 768px)" />

<link href="Phone.css/phone.css" rel="stylesheet" type="text/css" media="only screen
and (min-width: 0px) and (max-width: 320px)" />
```

Testing websites in different sized Browser Windows using JavaScript

In the event that you do not have access to any emulators or device tools you may want to consider a simple JavaScript that loads the appropriate style sheet based on the size of the browser window.

```
<script type="text/javascript">

function adjustStyle(width) {
 width = parseInt(width);
  if (width < 321) {
          $("#size-stylesheet").attr("href", "Phone.css/phone.css");
                    } else {      $("#size-stylesheet").attr("href", "styles.css");
                    }}

$(function() {
 adjustStyle($(this).width());
 $(window).resize(function() {
 adjustStyle($(this).width());
 });
});
```
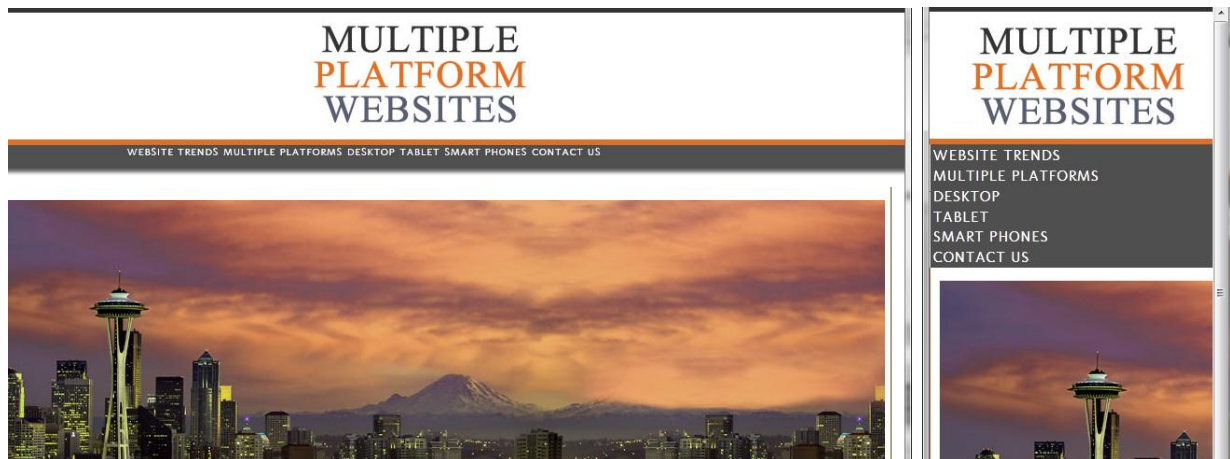
Ref : Chris Coyier

The code basically loads the phone.css style sheet when the width of the window is less than 321 px, alternatively it loads the default styles.css.

As shown below, the results will be different when the browser window is resized.

The above example is available on

http://visualwebz.com/Resources/multiple-platform-websites/index.html

The iPhone

If you're using an iPhone you're most likely going to stumble across zoom-in / zoom-out, yes you will have to use the zoom feature in order to better see the website. There is little that can be done with this besides disable the zoom and set the minimum/maximum width of the device. This is achieved with the 'viewport' as shown below.

<meta name="viewport" content="width=device-width, minimum-scale=1.0, maximum-scale=1.0">