

## Jodi Hostetter's CIS 155 Web Development Module 5 Assignment

### Best and Worst Website:

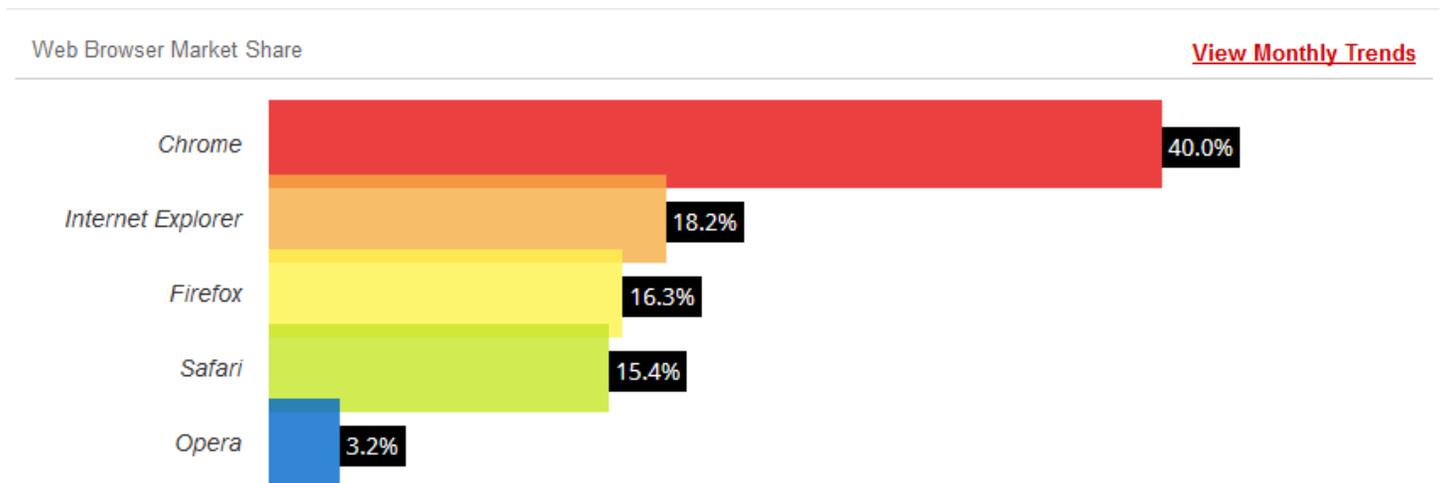
The worst site that I found during my search is [www.pricemachine.com](http://www.pricemachine.com). The best site I found during my search is <http://www.carparts.com>.

My vote for the best website among those submitted by my classmates is the best site chosen by Naomi <http://kripalu.org/>. Its hierarchical design follows five main topic menu rules, with each selection offering a minimum amount of submenu choices. Logo and headings remain consistent throughout the entire website. The site also follows the three or four color rule with a blend of bold and soothing neutrals. The images enhance the site and the use of personal photos promotes the service orientated personal touch environment and the use of attractive season orientated landscaping pictures sells the accommodation piece of the service. The use of undecorated links within paragraphs is visually appealing and offers additional information while keeping the description short and to the point. The option of using of the slide menu instead of watching the slideshow provides creative flexibility and a special, above and beyond touch. This site is designed to offer a destination to receive Yoga and other services that promote both physical and mental wellness. The design of the site promotes that very feel and would appeal to the target audience.

My vote for worst website among those submitted by my classmates is the one chosen by Sara <http://www.gatesnfences.com/>. The most obvious violation to the best practice checklist is the self-defined purpose of the site. The use of both ornamental and decorative is redundant; the text is inconsistent with the lower case "c" in convenience. The second obvious violation is the use of too many colors and the use of color to convey meaning. The mission statement on the home page is highlighted in red instead of being a part of a company profile or "About Us" page. The red and black contrasting colors used in the side menu plays tricks on my eyes making the content hard to read. Some of the menu option text does not fit into the designated area. There is some inconsistency found when drilling down into the links. The header text on the "Private Driveway" link does not fit into the section created to hold the text. The graphics and images do not enhance the webpage. They detract from the site, creating confusion that's distracting you from the content which is too much per page. This site would benefit from a well-planned hierarchical organizations plan as not to go too deep. There is some obvious main menu items such as "Gates", "Fences", "Security", "Vendors" and "Mission Statement" that would reduce the volume of data on the home page. The plan should include the use of drop down menu options to free up some more space on the page. The plan could utilize the attractive pictures of the gates by creating a photograph, testimonial page or attractive catalog page further reducing the chaos and clutter. This site has a lot of good content that would appeal to customers if the site was thought out better and more organized.

## Browsers, Screen Resolution and Access Speeds

Web browsers aren't simply about navigating the Internet anymore, but have become essential tools for managing your online interests, searches and history. In addition to speed and a clean interface, the best browsers have features like pinned tabs, bookmark and password management and privacy settings. The graph below published by W3counter.com displays the top five Web Browsers as of September 2014.



<sup>1</sup> This graph of data collected by W3school.com displays Web browser usage for the past six months. Although the percentages differ the order of the top five does not. This website also pointed out that you cannot - as a web developer - rely ONLY on statistics that statistics can be misleading adding that most people will use the browsers pre-installed on their computer allowing for market manipulation.

## Browser Statistics

2014	Chrome	Internet Explorer	Firefox	Safari	Opera
September	59.6 %	9.9 %	24.0 %	3.6 %	1.6 %
August	60.1 %	8.3 %	24.7 %	3.7 %	1.8 %
July	59.8 %	8.5 %	24.9 %	3.5 %	1.7 %
June	59.3 %	8.8 %	25.1 %	3.7 %	1.8 %
May	59.2 %	8.9 %	24.9 %	3.8 %	1.8 %
April	58.4 %	9.4 %	25.0 %	4.0 %	1.8 %

<sup>2</sup>

<sup>1</sup> Permanent link to this report: <http://www.w3counter.com/globalstats.php?year=2014&month=9>

<sup>2</sup> [http://www.w3schools.com/browsers/browsers\\_stats.asp](http://www.w3schools.com/browsers/browsers_stats.asp)

# Jodi Hostetter's CIS 155 Web Development Module 5 Assignment

The W3School also collected statistical data on screen resolution. The graph below displays their findings.

## Screen Resolution Statistics

As of today, 99% of your visitors have a screen resolution of 1024x768 pixels or higher:

Date	<a href="#">Other high</a>	1920x1080	1366x768	1280x1024	1280x800	1024x768	800x600	Lower
January 2014	34%	13%	31%	8%	7%	6%	0.5%	0.5%
January 2013	36%	11%	25%	10%	8%	9%	0.5%	0.5%
January 2012	35%	8%	19%	12%	11%	13%	1%	1%
January 2011	50%	6%		15%	14%	14%	0%	1%
January 2010	39%	2%		18%	17%	20%	1%	3%

Screenresolution.org has been tracking screen resolution since 2009. The statistics follow the same trends as W3school.com data collection.

## Internet Users Screen Resolution Realtime Statistics for 2014

History: [2009](#) | [2010](#) | [2011](#) | [2012](#) | [2013](#) | [2014](#)

	Resolution	%	Histogram
1	1366x768 HD	23.13%	
2	1920x1080 16:9 HD 1080	11.14%	
3	1024x768 4:3 XVGA	9.07%	
4	1280x1024 5:4 SXGA	8.17%	
5	1440x900 8:5 WSXGA	6.24%	
6	1280x800 8:5 WXGA	5.87%	
7	1600x900 16:9 HD+ 900p	5.13%	
8	1680x1050 8:5 WSXGA+	3.31%	
9	768x1024	2.61%	
10	1360x768	2.33%	

<sup>3</sup> [http://www.w3schools.com/browsers/browsers\\_display.asp](http://www.w3schools.com/browsers/browsers_display.asp)

<sup>4</sup> <http://www.screenresolution.org/>

## Jodi Hostetter's CIS 155 Web Development Module 5 Assignment

Access speed varies depending on the type of technology you use to connect to the internet. The table below explains how the technology is connected to the internet determines the speed in which that technology access the internet.

Technology	Description	Speed	Physical Medium	Comments
<b>Dial-up Access</b>	On demand access using a modem and regular telephone line (POT).	2400 bps to 56 Kbps	Twisted pair (regular phone lines)	<ul style="list-style-type: none"> <li>• Cheap but slow compared with other technologies.</li> <li>• Speed may degrade due to the amount of line noise</li> </ul>
<b>Cable</b>	Special cable modem and cable line required.	512 Kbps to 20 Mbps	Coaxial cable; in some cases telephone lines used for upstream requests.	<ul style="list-style-type: none"> <li>• Must have existing cable access in area.</li> <li>• Cost of bring service into an area and trenching cable can be prohibitive.</li> <li>• Networkable</li> </ul>
<b>ADSL/DSL</b> Asymmetric Digital Subscriber Line (ADSL is the same as DSL)	<p>This new technology uses the unused digital portion of a regular copper telephone line to transmit and receive information. ADSL is asymmetric since it <i>receives</i> at 6 to 8 Mbps per second but can only <i>send</i> data at 64 Kbps.</p> <p>A special modem and adapter card are required.</p>	128 Kbps to 8 Mbps	Twisted pair (used as a digital, broadband medium)	<ul style="list-style-type: none"> <li>• Doesn't interfere with normal telephone use.</li> <li>• Bandwidth is dedicated, not shared as with cable.</li> <li>• Bandwidth is affected by the distance from the network hubs. Must be within 5 km (3.1 miles) of telephone company switch.</li> <li>• Limited availability.</li> <li>• Not networkable</li> </ul>
<b>Wireless (LMCS)</b>	Access is gained by connection to a high speed cellular like local multi-point communications system (LMCS) network via wireless transmitter/receiver.	30 Mbps or more	<p>Airwaves (radio waves)</p> <p>Requires outside antenna.</p>	<ul style="list-style-type: none"> <li>• Can be used for high speed data, broadcast TV and wireless telephone service.</li> </ul>
<b>T1</b>	Special lines and equipment (DSU/CSU and router) required.	1.544 Mbps	Twisted-pair, coaxial cable, or optical fiber	<ul style="list-style-type: none"> <li>• Typically used for high bandwidth demands such as videoconferencing and heavy graphic file transfers.</li> </ul>

## Jodi Hostetter's CIS 155 Web Development Module 5 Assignment

				<ul style="list-style-type: none"> <li>• Minimum for large businesses and ISPs.</li> <li>• Expensive</li> </ul>
<b>ISDN</b>	Dedicated telephone line and router required.	64 Kbps to 128 Kbps	Twisted pair	<ul style="list-style-type: none"> <li>• Not available everywhere but becoming more widespread.</li> <li>• An ISDN line costs slightly more than a regular telephone line, but you get 2 phone lines from it.</li> <li>• 56K ISDN is much faster than a 56K dialup line</li> </ul>
<b>Broadband over Power (BPL)</b>	Uses existing electrical infrastructure to deliver broadband speeds using BPL "modems"	500Kbps to 3Mbps	Ordinary power lines	<ul style="list-style-type: none"> <li>• Still an emerging technology, not widely available</li> <li>• Significantly lower deployment costs than comparable technologies like DSL/Cable.</li> </ul>
<b>Satellite</b>	<p>Newer versions have two-way satellite access, removing need for phone line.</p> <p>In older versions, the computer sends request for information to an ISP via normal phone dial-up communications and data is returned via high speed satellite to rooftop dish, which relays it to the computer via a decoder box.</p>	6 Mbps or more	<p>Airwaves</p> <p>Requires outside antenna.</p>	<ul style="list-style-type: none"> <li>• Bandwidth is not shared.</li> <li>• Satellite companies are set to join the fray soon which could lead to integrated TV and Internet service using the same equipment and WebTV like integrated services</li> <li>• Latency is typically high</li> <li>• Some connections require an existing Internet service account.</li> <li>• Setup fees can range from \$500-\$1000.</li> </ul>

## Jodi Hostetter's CIS 155 Web Development Module 5 Assignment

If the World Wide Web consisted of only text then speed may not be so important but in today's world of pictures, music, movies and gaming containing multiple media types, communication with the WWW is critical to optimal functionality. The chart below lists the minimum speed requirement for various tasks.

Download Speed	Application	Minimum Broadband Technology
<b>768K - 1.5 Mbps</b>	Basic E-Mail, Web Browsing, VOIP- i.e. <i>Vonage</i>	<a href="#">Cable</a> , DSL, BPL, <a href="#">Satellite</a>
<b>1.5Mbps - 3 Mbps</b>	Streaming Music, Standard Definition Video (SD), Remote Surveillance, Telecommuting	Cable, DSL, BPL, <a href="#">Satellite</a>
<b>3 Mbps - 6 Mbps</b>	File Sharing (Small/Med Files), IPTV (Internet Protocol Television)	Cable, <a href="#">DSL</a> , BPL, <a href="#">Satellite</a>
<b>6 Mbps - 10 Mbps</b>	Online Gaming, Video on Demand (i.e. <a href="#">Netflix</a> )	Cable & DSL (>6 Mbps Only), <a href="#">Fiber</a> , 4G LTE
<b>10 Mbps - 25Mbps</b>	<a href="#">Telemedicine</a> , Remote Education, IPTV High Definition (HD)	Fiber, <a href="#">4G LTE</a>
<b>25 Mbps - 50 Mbps</b>	HD Video Surveillance	Fiber, 4G LTE
<b>50 Mbps - 100 Mbps</b>	Video Conferencing (Multiple users), Remote Supercomputing	Fiber, 4G LTE, OC-1, OC-3
<b>&gt; 100Mbps</b>	Real-Time Data Collection, Real-Time Medical Image Consultation	Fiber, 4G LTE, OC-3

6

<sup>6</sup> <http://broadband.about.com/b/2011/10/01/broadbandspeedtable.htm>

# Jodi Hostetter's CIS 155 Web Development Module 5 Assignment

## Case Study

The Java Jam Website was mapped out in a hierarchical organizational design, which fits the architecture of the brick and mortar location. The business offers two specific services refreshments and entertainment. The hierarchical organization type allows the owners to highlight each service offered.

Evaluation of the Java Jam Website revealed good use of the hierarchical organizational design, sections of the business are highlighted without appearing to shallow or creating too much depth. The color scheme is used consistently throughout all pages and is limited to a couple colors that complement each other. The images or graphics have a specific purpose that do not take away from the site or distract the visitor.

I would add an image of coffee to the menu page, perhaps a graphic showing steam coming from the cup. I would also add a section for the eatables listed on the homepage. I would add links on the music page to give the visitor a sample of the featured artist's music.

## Extra Credit

A pdf of this document can be found on [hostetteroutfitter.com](http://hostetteroutfitter.com) under the Case Study section. Select Chapter 5 Best Practice Report to review on-line.