

Industry Terms | Web Development + Design

1. HTML and CSS

HTML (HyperText Markup Language) and CSS (Cascading Style Sheets) are both important tools used for creating web pages. While both are considered languages, they are a bit different than programming languages in the way that it would be ridiculous to try and write a program using them. They are both something called a ‘markup language’. HTML is used to format content on webpages, whereas CSS is used to specify how you want that content to look. They are two different languages, but are often used in conjunction with each other.

This website shows examples of HTML programming and how to implement it:

https://www.w3schools.com/html/html_examples.asp

2. ARIA

The full name for this term is WAI-ARIA (Web Accessibility Initiative’s Accessible Rich Internet Applications specification), but it is commonly just referred to as ARIA in the field. As the name implies, it assists programs by making things on the internet more accessible. For example, it can work with HTML/CSS to hide and show certain elements on a web page, like widgets or text boxes. ARIA also extends the functionality of HTML by adding attributes, enabling the programming of more advanced things such as screen readers for the blind. Although ARIA can be helpful, it is best to try using as much HTML as one can before adding ARIA to their program.

This website shows some of examples of ARIA being used in programming:

http://heydonworks.com/practical_aria_examples/

3. Infinite + Parallax Scrolling

These are two different types of scrolling in web design (navigating up/down a page). Infinite scrolling is when the user scrolls down the page and, without having to click on anything, more content loads as they continue to scroll. This kind of scrolling is the most

popular and is used on the mobile versions of websites along with most social media (such as Instagram or Facebook).

Parallax scrolling is more difficult to implement and thus, it is a bit rarer to see on the internet. This type of scrolling is more controlled and less random than infinite. When the user scrolls, it takes them on a predefined course in which elements on the page move separately from each other and at different rates. This is great for capturing a person's attention.

The website of Bear Grylls is an example of parallax scrolling: <http://www.beargrylls.com/>

4. Visual Hierarchy

Visual hierarchy is used to describe the arrangement and placement of different elements on a plane in terms of their importance. It is used in UI design to convey information to users as efficiently and easily as possible. Things to keep in mind when determining visual hierarchy are size, color, contrast, alignment, repetition, proximity, negative space, textures, and style.

This blog shows some more advanced tips for using visual hierarchy to create a well-composed and aesthetic web page:

<https://99designs.com/blog/tips/6-principles-of-visual-hierarchy/>

5. A/B Testing

A/B testing is a method of testing which involves testing two elements against each other to find out which one performs better. For example, if you have two designs for an ad and one of them has a 2% CTR (click through rate) while the other one has a 3% CTR, then the second one is better and the first one's design must be revised in order to increase its ratings.

This short video explains what A/B testing is and how it works:

<https://www.youtube.com/watch?v=9zAQw6UhQLs>

6. Favicon

A favicon is the small icon that appears next to a website's URL or name in the browser's bar or tab. They are normally about 16x16 pixels. They are important for both branding and helping user experience by making web browsers more aesthetic.

This website will tell you more about favicons and how to make them:

<https://www.webdesignerdepot.com/2012/11/whats-the-point-of-favicons/>

7. Domains/IP Addresses

A domain is the web address of a specific site. For example, the domain for Google would be www.google.com. However, computers don't actually use the web addresses to direct you to a site. Instead, they use the IP address that is assigned to each domain in order to determine which website you want to go to. IP addresses are a string of numbers that represent the location of a site.

The following IP address is for Google. If you type this into the search bar of your browser, it will take you to Google.

216.58.195.238

Industry Terms | Cloud Technology

1. Cloud Computing

Instead of information being stored on your computers hard drive, it is stored on the internet. This allows data to be easily accessible and shared by multiple devices. There are different kinds of clouds for usage by different parties-- smaller clouds for the individual and small businesses and larger clouds for, well, larger businesses. There are also public and private clouds. Private clouds are typically more expensive, but allow the individual/business to have full control over their data and thus is more protected than the public clouds.

Adobe Creative Cloud, which we use at Full Sail, is an example of mainstream cloud technology:

<https://www.adobe.com/creativecloud.html>

2. Cluster

Computer clusters are just as they sound-- a bunch of computers wired together so that they essentially act as a single computing system. They are normally connected by LAN (local area network). Clusters are much smaller than clouds and, while clouds can consist of computers with different hardware, clusters all have similar hardware. This also makes them more difficult to set up.

This article from Google explains how they use cluster computation with their Cloud services to achieve faster speeds:

<https://cloud.google.com/solutions/using-clusters-for-large-scale-technical-computing>

3. Consumer Clouds

Consumer clouds are clouds that are paid for by the individual/business and are operated by a third party. These are typically done as a pay-as-you-go service. Data is kept in a ‘digital locker’ and with open access for the consumer.

Google Cloud is one of the most used cloud services on the internet, and it starts off its services for free:

<https://cloud.google.com/storage/>

4. Elastic Computer

Elastic computing is the ability to increase or decrease memory and storage to meet the flow of demand without worrying about specific planning or high maintenance. This is done automatically using system monitoring tools. While it does lower security and control, it is more efficient and quicker.

This is a link to the Amazon EC2, an example of elastic computation being used for public distribution:

<https://aws.amazon.com/ec2/>

5. Openstack

Openstack is an open source cloud operating system. It offers software tools for building and managing clouds, both public and private. It is very well-known in the cloud industry and is backed by many large, notable foundations.

This is the openstack website.

<https://www.openstack.org/software/>

6. CDN

CDN (content delivery network) is a bunch of servers used to deliver web content to a user. These servers work together to deliver content at a higher speed. Websites with high traffic, such as Netflix and Facebook, use CDNs to deliver their content. Going through a CDN also protects websites from DDOS attacks and otherwise increases web security.

Learn more about CDNs here:

<https://www.cloudflare.com/learning/cdn/what-is-a-cdn/>

7. Middleware

Middleware is software that connects multiple computer components and/or applications and allows many processes to be run at once, or for the different computers to interact with each other smoothly.

Django is a good example of helpful middleware, along with Glassfish, Wildfly, etc.:

<https://xebialabs.com/technology/django/>

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