Hi. Today we're going to be talking about HTML5. Specifically what it is, and why we aren't learning HTML1 instead.

**So what is HTML?**

HTML stands for hypertext markup language. Markup languages are actually very common. They're not the same as programming languages, instead they're special languages that use tags to **annotate or markup** documents. In HTML, the tags tell the browsers where you want to put headings, images, lists, links, etc.

A .HTML file is a special kind of file. For this extension, your computer knows that it should open it in an internet browser such as Chrome, Firefox or Safari. Your browser can read this file and it knows how to display it on the screen.

It's more than that, HTML file tags also allow screen readers and other assisted devices to utilize the tags to present the information in new and special ways. So HTML is very similar to English, you can understand it even if you don't know much about it.

Let's look at this example

<h1>hi there</h1>

<h2>hi there</h2>

hi there

hi there

Most of it is just a typical English language.But if you look closely, you can see that , h1 is just the heading tag. It says to the browser, this is something really important. I want you to put it in bigger font.

H2 also displays some sort of importance, but not as much.

*In the beginning, learning HTML is mostly about learning all those different tags that I showed you in that file.*

This is called learning the **syntax**. Syntax is that you learn which brackets to use, backslashes, and different things like that.

You may spend most of your time going,

***Oh what is the syntax of this tag***

***oh, did I remember that tag and did I write it the right way?***

But That's very short-lived. In just a little amount of time, you're gonna gain the **confidence** to not worry about your syntax and instead to be thinking about the **semantics** (or the meaning behind the tags.) How important is this information that I'm trying to get across, and is this the right tag to be using?

**Syntax:** how tag/ statement is written error free

**Semantics**: using this tag/statement is logically correct. Will It give me the result which I want.

**So what happened to HTML1? Why are we using something called HTML5?**

History

HTML was created in 1990 as a way to electronically connect different documents via hyperlinks. Hence, this idea of a web of connections.

Why???

scientists were using the Internet to access their different research papers, and each paper independent of the other.

But, HTML, gave you ways that you could read a paper, and right within the text, link to another exciting physics paper. Because the audience from HTML tended to be people like my dad up there in the corner, they were nuclear physicists, they didn't care about things such as color, images, or anything that wasn't science related, and that was the key. HTML was intended to work across any platform. And in order to do this you really had to avoid things such as special fonts or different colors or anything that was more about layout than content.

However, in 1993 Mosaic emerged as the first graphical browser.

And what that means is that there was a first browser to actually introduce the idea of images and when that happened, there was a lot of debate among the research community as to whether or not this was a good thing. The pioneers really wanted to keep it simple content based, let everyone access it.

But the innovators were saying no. People like pictures, they like layout. They like that even as much as they like the content. So there is a big battle between how the Internet should evolve from that point.

So after Mosaic emerged, the use of the Internet just absolutely exploded, and more and more people were using it for commercial means, instead of just for doing research. Mosaic had challengers though, in the form of **Netscape**, **Internet Explorer** and other browsers.

This was the start of what we call the browser wars. Each of these browsers decided that they wanted to create these **proprietary tags**, (tags that would only work on their browser).

Some of the examples were **marquee** (where you could have scrolling text, or ) or **blink** (which would only work on some of the browsers and not others).

Other tags were proprietary, they actually worked on any browser, but they went against the original spirit of HTML. They were tags such as font or center, for centering your text or background color.

This may not sound like a bad thing, but some computers didn't have the access, didn't have the ability to have all the different colors that other computers might have. And this led to some really ugly looking pages.

We all in a way suffer from browser wars.

This comes back to the idea that no one runs the Internet or the Web. However, some groups have taken a more proactive role to try to help standardize what's going on out there.

The first is the **Internet Engineering Task Force**, they really focus on the idea of how the different networks should collaborate and how they should work together.

The **World Wide Web Consortium** (**W3C**), deals with HTML and the evolution of HTML, they want to know what kinds of tags the browsers should and should not support.

Finally, one of the newest groups, **The Web Accessibility Initiative**, they want to make sure, that no matter how people are accessing the web, they have the same ability to view the content.

In 1990 to '94 it was all pages are very simple, text-based.

In '93, we talked about how the images entered the scene, and pretty much exploded the Internet. Cross-browser compatibility made many of the web pages just fall apart and led to incredibly ugly code.

In the beginning of 2000 browsers went back to this idea of separating **content** (HTML) from **style** (CSS).

And in 2005 it became standard practice to use HTML files to create

the content and CSS files to style it.

So as the browsers evolved so did HTML.

So, where are we now?

HTML5 is a cooperation between **W3C** and the **Web Hypertext Application Technology Working Group**, and what they've done is they've established these four guidelines for how HTML5 should be approached as browsers go to support it.

1. The first idea is that new features should be based on HTML, CSS, the DOM and JavaScript.
2. They want to reduce the need for external plug-ins, it's very frustrating when you're on a browser and you find that you can't watch the video that someone posted because you don’t have specific plugin to run that video.
3. They also want to move so that mark up, or the mark up language can replace scripting. If you find that more and more developers are writing code to make something happen, get rid of the code and just make a simple tag that can do it instead.
4. And finally, HTML5 should be device independent. It shouldn't matter whether you're on your phone, you laptop, a PC or even on a screen reader. You want everyone the same access to the information.

The first is the idea that **HTML is not a programming language**, but rather a way that browsers can translate documents into viewable web pages.

HTML was intended to facilitate many different content types. Images, pictures, links, lists. Every thing along that line.

So, this is why we're developing new standards in HTML5 to handle these new requirements that people desire and push browsers to adopt the new standards.

Questions:

Founder of interner & HTML?

Why we are not learning HTML 1 but HTML 5??