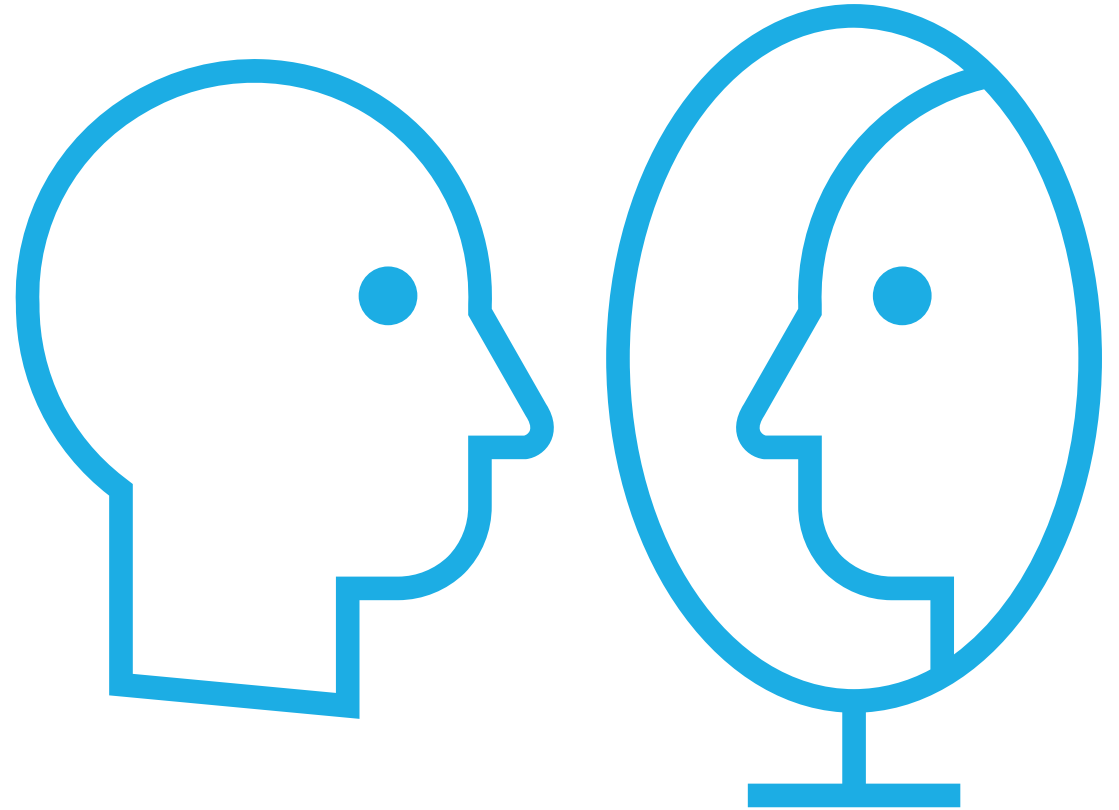


META TAGS & BASIC SEO



INTRODUCTION

So far we have talked about HTML tags that are responsible for a couple of simple tasks.

They can either be tags that actually put content on the page (p, h1, img, etc.), or they can be tags that provide semantic meaning to the layout (headers, main, footer, etc.) while also creating logical groupings.

For the most part we have been adding tags to the **body** of our page but ignoring the **head** tag. Remember that the body was used for actual content for the page, while the head tag was to be used for tags that don't actually add content to the page but instead provide information **about** the page.

META

This is where **meta tags** come into play. You may have heard the term “meta” before in many different context’s. Most of the time in a technical context, meta means *using an entity to describe another instance of the same entity type*.

That is a fancy definition but if you look at real examples it starts to make sense.

Meta-data: Data that describes other data. If you have a database of users for your site, you might collect some meta data (the amount of users, demographics, etc.)

Meta-tags: Tags in your HTML document that describes the other tags. They might describe how those tags should be interpreted, or maybe even a human language description of what the tags are trying to represent.

META TAGS

Let's look at some of the meta tags that appear automatically when using the **html:5** or **!** shortcut in VSCode:

```
<meta charset="UTF-8">
```

The first meta tag we see specifies the **charset** of the page. Without getting too much into the weeds, this tag tells the browser how to read the characters in your source code.

Remember at the lowest level, your code turns into 0's and 1's. It turns out that not all computers or applications agree on what order of 0's and 1's mean which characters. To solve this problem, we created **character encodings**. This is a fancy term that means we created tables that map certain orders of 0's and 1's to certain characters.

ASCII CHARACTER ENCODINGS

ASCII Code: Character to Binary

0	0011 0000	O	0100 1111	m	0110 1101
1	0011 0001	P	0101 0000	n	0110 1110
2	0011 0010	Q	0101 0001	o	0110 1111
3	0011 0011	R	0101 0010	p	0111 0000
4	0011 0100	S	0101 0011	q	0111 0001
5	0011 0101	T	0101 0100	r	0111 0010
6	0011 0110	U	0101 0101	s	0111 0011
7	0011 0111	V	0101 0110	t	0111 0100
8	0011 1000	W	0101 0111	u	0111 0101
9	0011 1001	X	0101 1000	v	0111 0110
A	0100 0001	Y	0101 1001	w	0111 0111
B	0100 0010	Z	0101 1010	x	0111 1000
C	0100 0011	a	0110 0001	y	0111 1001
D	0100 0100	b	0110 0010	z	0111 1010
E	0100 0101	c	0110 0011	.	0010 1110
F	0100 0110	d	0110 0100	,	0010 0111
G	0100 0111	e	0110 0101	:	0011 1010
H	0100 1000	f	0110 0110	;	0011 1011
I	0100 1001	g	0110 0111	?	0011 1111
J	0100 1010	h	0110 1000	!	0010 0001
K	0100 1011	I	0110 1001	'	0010 1100
L	0100 1100	j	0110 1010	"	0010 0010
M	0100 1101	k	0110 1011	{	0010 1000
N	0100 1110	l	0110 1100	}	0010 1001
				space	0010 0000

META TAGS CONT.

The next default meta tag you will see is very important when it comes to how your site will respond to screen size changes.

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

In the earlier days of web development, it was totally acceptable to create one page that was designed for a standard desktop and no other sizes. If people had a slightly different screen size, the website would literally squish to fit all the content into the width of the screen.

Obviously in the days of phones and tablets this doesn't work. We needed a tag that told the browser to not just squish the site down anymore and instead allow us as developers to tell the browser how it should respond to different screen sizes. That is what this meta tag does.

META TAGS CONT.



Without the
viewport meta tag.
Notice how the
website simply
shrank.



Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi. Nam liber tempor cum soluta nobis eleifend ntion congue nihil imperdiet domine

With the viewport
meta tag. This tag
also allows us to
use something
called “media
queries” in CSS.

META TAGS CONT.

So already we have some examples of meta tags that are so standard that not having them on your page can ruin your user's experience on your page. Before we take a look at some more common meta tags, let's break down the usual form of a meta tag:

```
<meta name="nameValue" content="contentValue" />
```

In this form we have a void tag, with two basic attributes. The **name** and **content**. Simply put, the name is supposed to be the *thing* you want to set, and the content is what you want to set it too.

As with most things, this makes more sense once you see some examples.

META TAGS CONT.

There are many meta tags that are “standard”. Meaning that everyone agrees on what the goal of that meta tag is. But it should also be noted that any developer can make up their own meta tag names to be used in their own applications.

We will start with some of the more basic meta tags:

```
<meta name="description" content="Delicious, locally sourced,  
farm to table pizza in the heart of Okotoks.">
```

This is the description meta tag. Designed to give a description of the page. This is also what search engine bots use to show on pages like Google when your site shows up in a search result.

META TAGS CONT.

```
<meta name="keywords" content="Pizza, Delicious, Okotoks,  
Restaurant, Modern">
```

The keywords meta tag was initially designed to match what people were typing into search engines. The content is a comma-separated list of well, keywords. Due to abuse, keywords aren't really used by search engines much anymore.

```
<meta name="author" content="Doug Pizza">
```

The author tag is widely accepted to give credit to the author of the **content** of the page. Not the web designer! If your client is providing you with all the content for the page, they are the author.

KNOWLEDGE CHECK

Neat, let's describe our sites!

1. Create a project called HtmlMeta in your Scratch folder.
2. Connect this project to Git/GitHub.
3. Pick a food you want to make a site about (don't overthink this, any food).
4. Using proper semantic tags, add a small amount of content to the site (whatever you think is fun).
5. Add, commit and push your code.
6. Add the meta tags **description**, **author** and **keywords** to your site and be truthful!
7. Add, commit and push your code.

SOCIAL MEDIA META TAGS

Have you ever been on social media and seen a link to an external website? If you have, you would notice that it isn't simply text. Usually a card with lots of information and even an image appears.

For example, on Facebook you might see a share that looks like:



SOCIAL MEDIA META TAGS CONT.

How does Facebook know what to put in these fields automatically? The answer is meta tags! Facebook uses the **og** meta tags to collect data about your site when it is shared on Facebook.



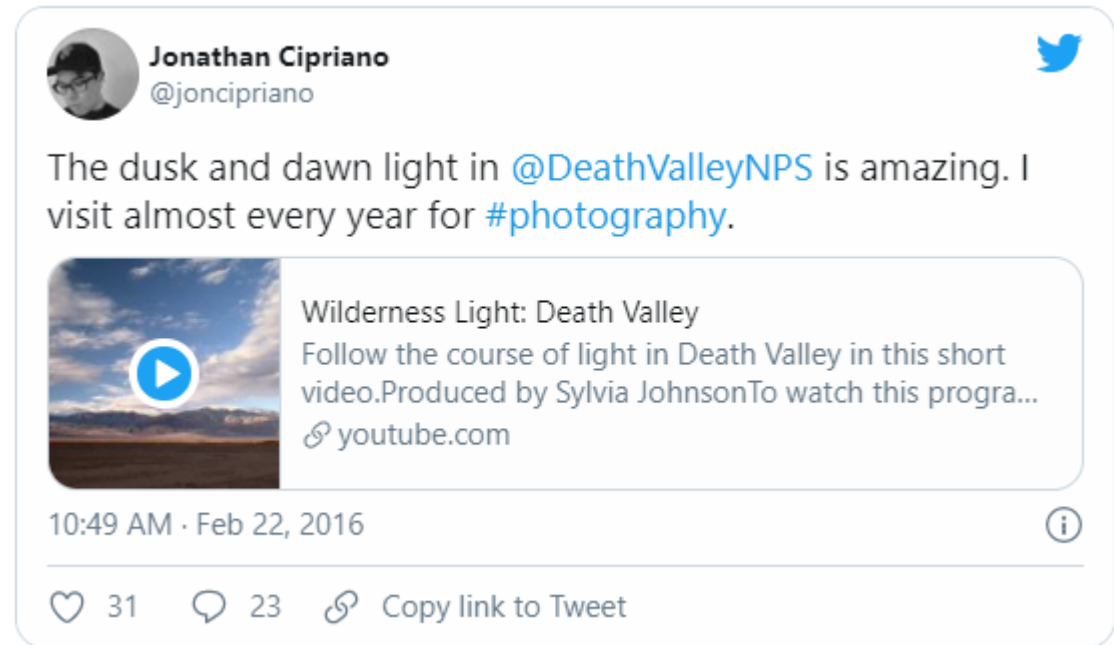
SOCIAL MEDIA META TAGS CONT.



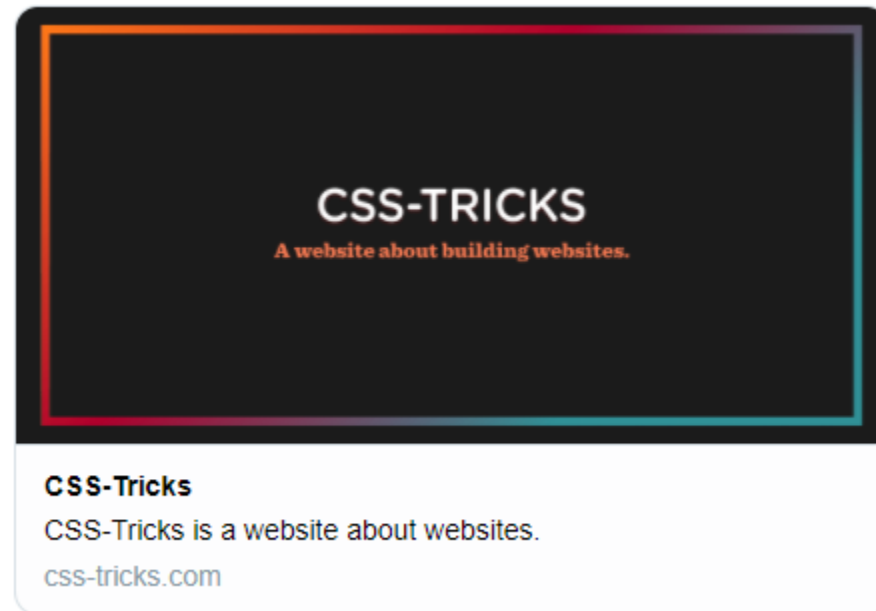
```
<meta property="og:url" content="http://www.nytimes.com/2015/02/19/arts/international/when-great-minds-dont-think-alike.html" />
<meta property="og:type" content="article" />
<meta property="og:title" content="When Great Minds Don't Think Alike" />
<meta property="og:description" content="How much does culture influence creative thinking?" />
<meta property="og:image" content="http://static01.nyt.com/images/2015/02/19/arts/international/19iht-btnumbers19A/19iht-btnumbers19A-facebookJumbo-v2.jpg" />
```

SOCIAL MEDIA META TAGS CONT.

Twitter has a very similar implementation that allows your website to show up correctly when users share your site in their tweets.



SOCIAL MEDIA META TAGS CONT.



```
<meta property="og:site_name" content="CSS-Tricks">
<meta name="twitter:card" content="summary_large_image">
<meta name="twitter:creator" content="@baumannzone">
<meta name="twitter:site" content="@CSS">
<meta property="og:description" content="CSS-Tricks is a website about websites.">
<meta property="og:image" content="https://i2.wp.com/css-tricks.com/wp-content/uploads/2020/12/social-default.png?fit=1200%2C628&ssl=1">
```


SOCIAL MEDIA META TAGS CONT.

One thing that you might have noticed from the pervious slides is that the meta tags used for social media links all had real external links to existing sites on the web.

This means that we really can't use these until we get our sites live on the internet, but for now feel free to use holders like:

- <https://mysite.ml>
- <https://awesomesite.ml>
- Etc.

META TAGS & SEO

Meta tags are your websites first and best ability to tell engines like Google what your site is all about. Today, companies like google have implemented some more sophisticated crawlers to try and figure out what your site is all about.

Even with these changes, giving each page of your site a solid description, hitting the right keywords and making sure your pages are shareable on social media makes a measurable difference on how a site performs overall.

Fine tuning your site to be searchable on sites like Google is called **search engine optimization** or SEO for short. This is a pretty in depth topic and there are lots of tools on the market that will help you try to best position your site for success, but as mentioned our first line of offence is making sure our meta tags do as good a job as possible in describing out pages to any web crawlers out there.

KNOWLEDGE CHECK

Neat, let's describe our sites to social media users!

1. Add the FaceBook meta tags **og:url**, **og:description**, **og:title**, **og:image**, **og:type** to your site using a holder (fake) URL.
2. Add, commit and push your code.
3. See if you can understand the docs on Twitter to add their meta tags for a standard card
<https://developer.twitter.com/en/docs/twitter-for-websites/cards/overview/summary>
4. Add commit and push your code.

Just like semantic tags, don't skip out on meta tags! Some of them actually impact how your pages function, while others are used to give context to your pages.

Also make sure you are not just copy pasting meta tags like description between pages. This is a great way to lose out on giving your specific pages specific context.