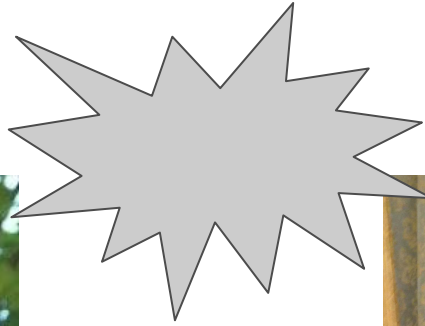




March 1, 2017



Dawn Pointer McCleskey, MLS



Ashley Wichman

- Websites need to be machine-friendly
- Add meta elements and markup to your page templates
- Test your site's SEO, and iterate

webmasters.googleblog.com

developers.google.com/search/docs/guides/

moz.com/blog

searchenginejournal.com

searchengineland.com

searchenginewatch.com

yoast.com

ON-THE-PAGE FACTORS

These elements are in the direct control of the publisher

CONTENT

Cq	QUALITY	Are pages well written & have substantial quality content?
Cr	RESEARCH	Have you researched the keywords people may use to find your content?
Cw	WORDS	Do pages use words & phrases you hope they'll be found for?
Cf	FRESH	Are pages fresh & about "hot" topics?
Cv	VERTICAL	Do you have image, local, news, video or other vertical content?
Ca	ANSWERS	Is your content turned into direct answers within search results?
Vt	THIN	Is content "thin" or "shallow" & lacking substance?

ARCHITECTURE

Ac	CRAWL	Can search engines easily "crawl" pages on site?
Ad	DUPLICATE	Does site manage duplicate content issues well?
Am	MOBILE	Does your site work well for mobile devices & make use of app indexing?
As	SPEED	Does site load quickly?
Au	URLS	Do URLs contain meaningful keywords to page topics?
Ah	HTTPS	Does site use HTTPS to provide secure connection for visitors?
Vc	CLOAKING	Do you show search engines different pages than humans?

HTML

Ht	TITLES	Do HTML title tags contain keywords relevant to page topics?
Hd	DESCRIPTION	Do meta description tags describe what pages are about?
Hs	STRUCTURE	Do pages use structured data to enhance listings?
Hh	HEADERS	Do headlines & subheads use header tags with relevant keywords?
Vs	STUFFING	Do you excessively use words you want pages to be found for?
Vh	HIDDEN	Do colors or design "hide" words you want pages to be found for?

THE PERIODIC TABLE OF SEO SUCCESS FACTORS

Search engine optimization — SEO — seems like alchemy to the uninitiated. But there's a science to it. Below are some important "ranking factors" and best practices that can lead to success with both search engines and searchers.

ON-THE-PAGE SEO

CONTENT	ARCHITECTURE	HTML
Cq Quality	Ac Crawl	Ht Titles
Cr Research	Ad Duplicate	Hd Description
Cw Words	Am Mobile	Hs Structure
Cf Fresh	As Speed	Hh Headers
Cv Vertical	Au URLs	Vs Shuffling
Ca Answers	Ah HTTPS	Vh Hidden
Vt Thin	Vc Cloaking	

OFF-THE-PAGE SEO

TRUST	LINKS	PERSONAL	SOCIAL
Ta Authority	Lq Quality	Pc Country	Sr Reputation
Te Engage	Lt Text	Pl Locality	Ss Shares
Th History	Ln Numbers	Ph History	
Ti Identity	Vp Paid	Ps Social	
Vd Privacy	Vi Spam		
Va Ads			

FACTORS WORK TOGETHER

All factors on the table are important, but those marked 3 carry more weight than 1 or 2. No single factor guarantees top rankings or success, but having several favorable ones increases the odds. Negative "violation" factors shown in red harm your chances.

OFF-THE-PAGE FACTORS

Elements influenced by readers, visitors & other publishers

TRUST

Ta	AUTHORITY	Do links, shares & other factors make site a trusted authority?
Te	ENGAGE	Do visitors spend time reading or "bounce" away quickly?
Th	HISTORY	Has site or its domain been around a long time, operating in same way?
Ti	IDENTITY	Does site use means to verify its identity & that of authors?
Vd	PIRACY	Has site been flagged for hosting pirated content?
Va	ADS	Is your content ad heavy, especially "above-the-fold"?

LINKS

Lq	QUALITY	Are links from trusted, quality or respected web sites?
Lt	TEXT	Do links pointing at pages use words you hope they'll be found for?
Ln	NUMBER	Do many links point at your web pages?
Vp	PAID	Have you purchased links in hopes of better rankings?
Vi	SPAM	Have you created links by spamming blogs, forums or other places?

PERSONAL

Pc	COUNTRY	What country is someone located in?
Pl	LOCALITY	What city or local area is someone located in?
Ph	HISTORY	Has someone regularly visited your site or socially favored it?
Ps	SOCIAL	Has someone or their friends socially favored the site?

SOCIAL

Sr	REPUTATION	Do those respected on social networks share your content?
Ss	SHARES	Do many share your content on social networks?

Written By: [Search Engine Land](#)

Learn More: <http://tand.com/seotable>

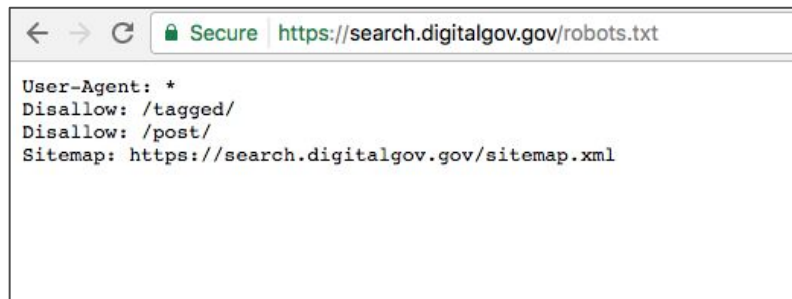
Design By: [COLONY FIVE](#)

Copyright Third Door Media

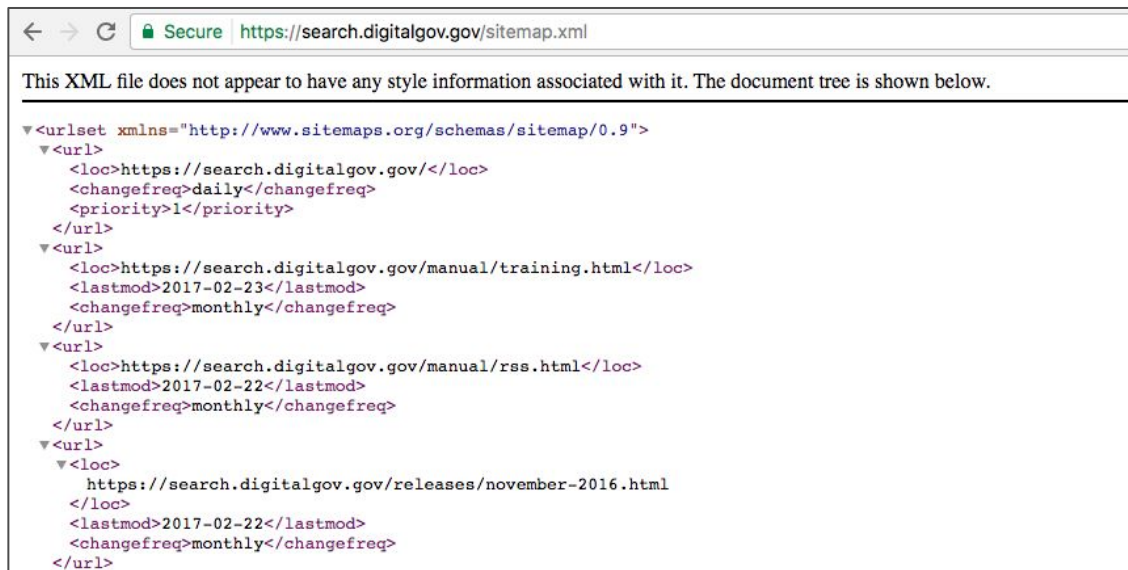
“Can search engines easily get around your site?”

- Commercial services crawl to populate their indexes
- They display results based on their crawling
- Bad or incomplete crawling can be influenced by...

- A text file read by search engine spiders
 - Placed on the root of your domain:
<https://www.agency.gov/robots.txt>
- Tells the spiders where they can and can't go on your site
- Also should tell spiders where to find the official list of your site's URLs (aka your sitemap)



- A file that lists the URLs of your site
 - Also placed on the root of your domain:
<https://www.agency.gov/sitemap.xml>
- Tells crawlers about your site, its content and its organization
- Maximum file size: 50 MB



- “The Fetch as Google tool enables you to test how Google crawls or renders a URL on your site.
- You can use Fetch as Google to see whether Googlebot can access a page on your site, how it renders the page, and whether any page resources (such as images or scripts) are blocked to Googlebot.”

- Same concept as Google's :)

Site 
search.digitalgov.gov

Fetch as Bingbot (Beta)

Submit a URL to see how the page's code appears to Bing.

Enter a URL



REFETCH

DELETE

EXPORT

URL

Status



<https://search.digitalgov.gov/manual/collections.html> c?

Completed



<http://search.digitalgov.gov/> c?

Completed

URL: <https://search.digitalgov.gov/manual/collections.html>

Status: Completed

HTTP/1.1 200 OK

Cache-Control: max-age=600

Connection: keep-alive

Date: Wed, 01 Mar 2017 13:57:29 GMT

Via: 1.1 varnish

Via: 1.1 search.digitalgov.gov

Content-Length: 4150

Content-Type: text/html; charset=utf-8

Content-Encoding: gzip

Expires: Wed, 01 Mar 2017 14:06:43 GMT

Last-Modified: Mon, 27 Feb 2017 19:27:18 GMT

Accept-Ranges: bytes

Age: 0

Server: GitHub.com

Vary: Accept-Encoding

Access-Control-Allow-Origin: *

Strict-Transport-Security: max-age=31536000; includeSubdomains; preload

X-Cache: MISS

X-Cache-Hits: 0

X-Fastly-Request-ID: 2285f07545842732ad6bf97c3df8b1acc5abf9

X-GitHub-Request-Id: DAEA:68AF:31A53F6:433FA39:58B6D31B

X-Served-By: cache-iad2620-IAD

X-Timer: S1488376649.789104,Y50,VE2

<!DOCTYPE html>

<html lang="en">

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<meta charset="utf-8">

<title>How to Create Collections Within Our Index</title>

<meta name="description" content="">

<meta name="author" content="">

<link href="https://fonts.googleapis.com/css?family=Maven+Pro:400,700" media="screen" rel="stylesheet" type="text/css" />

<link href="/bootstrap/css/bootstrap.css" rel="stylesheet">

<link rel="stylesheet" href="/stylesheets/font-awesome.min.css">

<!--if IE 7-->

<link rel="stylesheet" href="/stylesheets/font-awesome-ie7.min.css">

<!--endif-->

<!--<link href="/assets/css/bootstrap-responsive.css" rel="stylesheet">-->

<link href="/stylesheets/custom.css" rel="stylesheet">

<!-- HTML5 shim, for IE6-8 support of HTML5 elements -->

<!--[if lt IE 9]>

“Does your site manage duplicate content issues well?”

- If a single link is being served multiple ways, search engines have to "guess" which version is the right one.
- Multiple URLs for same content, depending on folder
 - <http://agency.gov/similar-content>
 - <http://www.agency.gov/similar-content>
 - <https://agency.gov/similar-content>
 - <https://www.agency.gov/similar-content>
 - <https://agency.gov/content/similar-content>
 - <https://content.agency.gov/similar-content>

- A rel=canonical link in the <head> tells search engines which version is the version of record
- Google's rel=canonical on their page about rel=canonicals



```
1 <!doctype html><html class="hcf" data-page-type="ANSWER" lang="en"><head><title>Use canonical URLs - Search Console Help</title><meta content="width=device-width,initial-scale=1,maximum-scale=1,user-scalable=no" name="viewport"><meta content="email=no" name="format-detection"><meta content="follow,index" name="robots"><meta content="IE=edge,chrome=1" http-equiv="X-UA-Compatible"><meta content="This article describes how you can use canonical URLs to improve link and ranking signals for content available through multiple URL structures or via syndication.&#10;In the world of content management" name="description"><link href="https://support.google.com/webmasters/answer/139066?hl=en" rel="canonical"><style>#font-face{font-family:'Roboto';font-style:normal;font-weight:400;src:local('Roboto Regular'),local('Roboto-Regular'),url(https://fonts.gstatic.com/s/roboto/v15/sTdaA6j0Psb920Vjv-mrzH-_kf6ByYO6CLYdB4HQE-
```

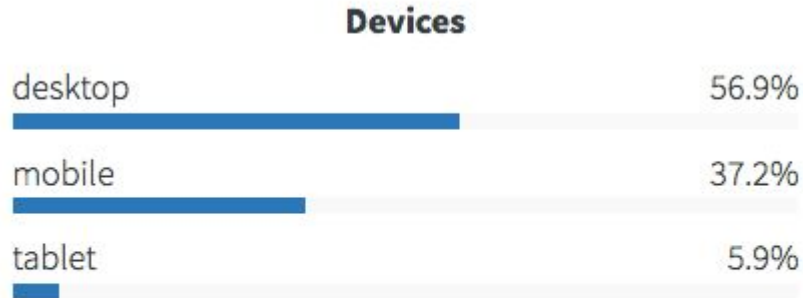
- Use 301 redirects when permanently moving content
- The redirect will tell search engines that a page has permanently moved to a new location

- Be consistent when linking within your website
- I.e., make sure all your page links are <https://agency.gov/page/> or www.agency.gov/page/ or /page/

- For Google, set your preferred domain (www or non-www)
 - Search Console -> Choose the site you want to set it for -> Gear Icon -> Site Settings -> Preferred Domain section
- Can use 301s to redirect traffic from your non-preferred domain


“Does your site work well for mobile devices?”


- In spring 2016, Google increased the impact of mobile-friendliness as a ranking signal
- Also:



Federal
websites!

Mobile-Friendly Test


 http://usa.gov/

 Alert - 2 blocked resources




Tested on: Feb 28, 2017 at 5:53 PM

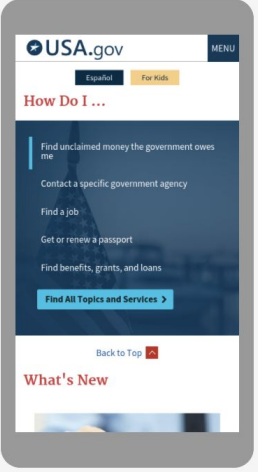
Page is mobile-friendly

This page is easy to use on a mobile device

 SUBMIT TO GOOGLE

Additional resources

-  Open site-wide mobile usability report
-  Learn more about mobile-friendly pages
-  Post comments or questions to our discussion group



The mockup shows the USA.gov website on a mobile device. The header includes the USA.gov logo, a menu button, and language options for Español and For Kids. The main content area is titled 'How Do I ...' and lists several services: Find unclaimed money the government owes me, Contact a specific government agency, Find a job, Get or renew a passport, and Find benefits, grants, and loans. A 'Find All Topics and Services' button is at the bottom of the list. Below the list is a 'Back to Top' link with an upward arrow icon. The footer section is titled 'What's New' and shows a blurred image of a person.

“Does your site load quickly?”

- Users will abandon your site if it does not load fast enough
- Impact on relevancy ranking not as great as other factors (Google noted this back in 2010) but it is critical to overall UX

PageSpeed Insights has moved the User Experience test for mobile pages into the Mobile Friendly Test, which you can try out [here](#).

PageSpeed Insights

[ANALYZE](#)

Mobile



Desktop

69 / 100 Suggestions Summary

Should Fix:

Eliminate render-blocking JavaScript and CSS in above-the-fold content

[Show how to fix](#)

Consider Fixing:

Leverage browser caching

[Show how to fix](#)

Minify JavaScript

[Show how to fix](#)

7 Passed Rules

[Show details](#)

Download optimized [image](#), [JavaScript](#), and [CSS resources](#) for this page.

**The results are cached for 30s. If you have made changes to your page, please wait for 30s before re-running the test.*



Web Performance

Learn more about [web performance tools](#) at Google, including browser extensions and APIs for Insights, PageSpeed Service, and our optimization libraries.

Give Feedback

Have comments or questions about PageSpeed Insights? [Send feedback](#) or [discuss on our mailing list](#).

About PageSpeed Insights

PageSpeed Insights analyzes the content of a web page, then generates suggestions to make that page faster. [Learn more](#).

“Do URLs contain meaningful keywords to page topics?”

- Use simple, human-friendly URLs
- Use punctuation
 - “The URL

is much more useful to us than

.”
 - We recommend that you use hyphens (-) instead of underscores (_)

“Does your site use HTTPS to provide a secure connection for visitors?”

- Since 2014, Google has been advocating “HTTPS Everywhere”
- It is a lightweight ranking signal
- Also, we make it easy with DigitalGov Search!

Pulse

HTTPS Analytics About Feedback



Secure HTTP (HTTPS)

Last updated February 24, 2017

This data measures whether federal domains support the HTTPS protocol (<https://>), and the strength of that support. HTTPS provides a secure connection across the internet between websites and their visitors, and is becoming the new baseline for public web services. As part of this shift, the U.S. federal government is in the process of transitioning **entirely to HTTPS**.

Note that HTTPS generally **does not affect** whether a website is vulnerable to hacking. For more information on what HTTPS does (and doesn't do), [visit the HTTPS FAQ](#).

HTTPS and TLS data was last collected through a scan of the public internet on **February 24, 2017**.

By Agency

Show 10 | [25](#) | [50](#) | [100](#) entries [Download CSV](#)

Search:

| Domain | Uses HTTPS | Enforces HTTPS | Strict Transport Security (HSTS) | Preloaded (recommended) | SSL Labs Grade |
|---|------------|----------------|----------------------------------|-------------------------|--------------------|
| digitalgov.gov | Yes | Yes | Yes | | A+ |
| <p>HTTPS enforced. Consider preloading this domain to enforce HTTPS across the entire zone.</p> <p>Known public subdomains:</p> <ul style="list-style-type: none"> 100% of 5 public sites known to Censys enforce HTTPS. 100% of 4 public sites known to the Digital Analytics Program enforce HTTPS. <p>For more details, read our methodology, or download subdomain data for this agency.</p> | | | | | |

Showing 1 to 1 of 1 entries (filtered from 1,118 total entries)

<< **1** >>

“Do HTML title tags contain
keywords relevant to page topics?”


```
<title>Key Attributes of Excellent  
Titles</title>
```

to the page

- Only include site or agency name following a pipe
- `<title>API documentation for Commerce.gov | Department of Commerce</title>`

- Descriptive and (<70 characters)
- Relevant to queries

“Do meta descriptions describe
what pages are about?”

```
<meta name="Description"  
content:"Description text goes here.">
```

- Unique to page
- ~155 characters including spaces
- Keywords at beginning

“Do headlines & subheads use header tags with keywords?”

- Use `<h#>` tags!
- Page title should be in the `<h1>`
- Tags needs to be in order
 - `<h1>`
 - `<h2>`
 - `<h3>`
 - etc.

<meta>

Positive commands:

```
<title>
```

```
<meta name="description" content="blah blah">
```

```
<meta name="google-site-verification" content="..." />
```

```
<meta http-equiv="Content-Type" content="...; charset=..." />
```

```
<meta charset="..." >
```

Negative commands:

```
<meta name="robots" content="various_commands_see_help_page">
```

```
<meta name="googlebot" content="various_commands_see_help_page">
```

```
<meta name="google" content="nositelinkssearchbox" />
```

```
<meta name="google" content="notranslate" />
```

“Do pages use structured data
to enhance listings?”

- Informs rich snippets and “cards” in search results
- Allows computers to interpret what the text means
 - “Semantic markup”

Entities & Attributes

Nouns & Adjectives

What is it, and what's it like?



Schema.org

- `itemprop`

Open Graph Protocol

- `og:`

Dublin Core

- `dc:`

...and more!

```
1 <!DOCTYPE html>
2 <html lang="en" dir="ltr">
3 <head>
4 <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1">
5 <meta charset="utf-8" />
6 <link rel="shortcut icon" href="https://www.commerce.gov/sites/all/themes/doc/doc_theme/favicon.ico" type="image/vnd.microsoft.icon" />
7 <meta name="viewport" content="initial-scale=1" />
8 <meta name="viewport" content="width=device-width, initial-scale=1.0, user-scalable=yes" />
9 <meta name="MobileOptimized" content="width" />
10 <meta name="description" content="We invite you to use our content API to enhance the value, accessibility and usability of Commerce data for government and the public." />
11 <meta name="HandheldFriendly" content="true" />
12 <meta name="apple-mobile-web-app-capable" content="yes" />
13 <meta name="keywords" content="Data, Application Programming Interfaces (APIs)" />
14 <meta name="generator" content="Drupal 7 (http://drupal.org)" />
15 <link rel="image_src" href="https://www.commerce.gov/sites/commerce.gov/files/open_for_biz-agenda_logo_final.jpg" />
16 <link rel="canonical" href="https://www.commerce.gov/page/api-documentation-commercegov" />
17 <link rel="shortlink" href="https://www.commerce.gov/node/1489" />
18 <meta property="og:site_name" content="Department of Commerce" />
19 <meta property="og:type" content="website" />
20 <meta property="og:url" content="https://www.commerce.gov/page/api-documentation-commercegov" />
21 <meta property="og:title" content="API documentation for Commerce.gov" />
22 <meta property="og:description" content="We invite you to use our content API to enhance the value, accessibility and usability of Commerce data for government and the public." />
23 <meta property="og:updated_time" content="2016-09-23T13:36:33-04:00" />
24 <meta name="twitter:card" content="summary_large_image" />
25 <meta name="twitter:site" content="@CommerceGov" />
26 <meta name="twitter:url" content="https://www.commerce.gov/page/api-documentation-commercegov" />
27 <meta name="twitter:description" content="We invite you to use our content API to enhance the value, accessibility and usability of Commerce data for government and the public." />
28 <meta name="twitter:title" content="API documentation for Commerce.gov" />
29 <meta property="article:published_time" content="2015-08-25T17:06:50-04:00" />
30 <meta property="article:modified_time" content="2016-09-23T13:36:33-04:00" />
31 <meta itemprop="name" content="API documentation for Commerce.gov" />
32 <meta itemprop="description" content="We invite you to use our content API to enhance the value, accessibility and usability of Commerce data for government and the public." />
33 <title>API documentation for Commerce.gov | Department of Commerce</title>
34 <link type="text/css" rel="stylesheet" href="https://www.commerce.gov/sites/commerce.gov/files/css/css_xE-rWrJf-fncB6ztZfd2huxqgqxu4WO-qwma6Xer30m4" />
35 <link type="text/css" rel="stylesheet" href="https://www.commerce.gov/sites/commerce.gov/files/css/css_ujN36yHagKHTKyxjs_cj3_DuSqYFJT0aKF2F28xMKws" />
36 <link type="text/css" rel="stylesheet" href="https://www.commerce.gov/sites/commerce.gov/files/css/css_KmGK7kK9g3XAfDWNdlV261sD5ZgVeOF2Phfvs8v197k" />
```

Recommended entity type: CreativeWork

Subtypes:

- articles
 - news
 - reports
- blog posts
- datasets
- maps
- webpages
- entire websites

Other useful entity types

- Organization
 - GovernmentOrganization
 - NOTE! Google's org cards are managed through Google My Business
- ContactPoint
 - PostalAddress

JSON-LD

- `<script>` in the `<head>`

RDFa

- inline properties in the `<body>`

Microdata

- inline properties in the `<body>`

```
1 <script type="application/ld+json">
2 {
3   "@context": "http://schema.org",
4   "@type": "BreadcrumbList",
5   "itemListElement": [{
6     "@type": "ListItem",
7     "position": 1,
8     "item": {
9       "@id": "https://example.com/books",
10      "name": "Books",
11      "image": "http://example.com/images/icon-book.png"
12    }
13  }, {
14    "@type": "ListItem",
15    "position": 2,
16    "item": {
17      "@id": "https://example.com/books/authors",
18      "name": "Authors",
19      "image": "http://example.com/images/icon-author.png"
20    }
21  }, {
22    "@type": "ListItem",
23    "position": 3,
24    "item": {
25      "@id": "https://example.com/books/authors/anneleckie",
26      "name": "Ann Leckie",
27      "image": "http://example.com/images/author-leckie-ann.png"
28    }
29  }, {
30    "@type": "ListItem",
31    "position": 4,
32    "item": {
33      "@id": "https://example.com/books/authors/ancillaryjustice",
34      "name": "Ancillary Justice",
35      "image": "http://example.com/images/cover-ancillary-justice.png"
36    }
37  }]
38 }
39 </script>
```



```
1 <ol vocab="http://schema.org/" typeof="BreadcrumbList">
2   <li property="itemListElement" typeof="ListItem">
3     <a property="item" typeof="WebPage"
4       href="https://example.com/books">
5       <span property="name">Books</span>
6       </a>
7     <meta property="position" content="1">
8   </li>
9   ,
10  <li property="itemListElement" typeof="ListItem">
11    <a property="item" typeof="WebPage"
12      href="https://example.com/books/sciencefiction">
13      <span property="name">Science Fiction</span>
14      </a>
15      <meta property="position" content="2">
16    </li>
17    ,
18    <li property="itemListElement" typeof="ListItem">
19      <a property="item" typeof="WebPage"
20        href="https://example.com/books/sciencefiction/awardwinnders">
21        <span property="name">Award Winners</span>
22        </a>
23        <meta property="position" content="3">
24      </li>
25    </ol>
```

```
1 <ol itemscope itemtype="http://schema.org/BreadcrumbList">
2   <li itemprop="itemListElement" itemscope
3     itemtype="http://schema.org/ListItem">
4     <a itemscope itemtype="http://schema.org/Thing"
5       itemprop="item" href="https://example.com/books">
6       <span itemprop="name">Books</span>
7       </a>
8       <meta itemprop="position" content="1" />
9     </li>
10   ,
11   <li itemprop="itemListElement" itemscope
12     itemtype="http://schema.org/ListItem">
13     <a itemscope itemtype="http://schema.org/Thing"
14       itemprop="item" href="https://example.com/books/sciencefiction">
15       <span itemprop="name">Science Fiction</span>
16       </a>
17       <meta itemprop="position" content="2" />
18     </li>
19   ,
20   <li itemprop="itemListElement" itemscope
21     itemtype="http://schema.org/ListItem">
22     <a itemscope itemtype="http://schema.org/Thing"
23       itemprop="item"
24       href="https://example.com/books/sciencefiction/ancillaryjustice">
25       <span itemprop="name">Ancillary Justice</span>
26       </a>
27       <meta itemprop="position" content="3" />
28     </li>
29 </ol>
```

Essential schema.org properties

Author

dateModified

datePublished

Headline

Name

Url

Description

Breadcrumb (WebPage)

<http://www.w3resource.com/schema.org/introduction.php>

Control your site name

```
1 <head itemscope itemtype="http://schema.org/WebSite">
2 <title itemprop='name'>Your WebSite Name</title>
3 <link rel="canonical" href="https://example.com/" itemprop="url">
```

Enable site search within Google results

```
1 <div itemscope itemtype="http://schema.org/WebSite">
2   <meta itemprop="url" content="https://www.example.com/" />
3   <form itemprop="potentialAction" itemscope
4     itemtype="http://schema.org/SearchAction">
5     <meta itemprop="target" content="https://query.example.com/search?q=
6       {search_term_string}" />
7     <input itemprop="query-input" type="text" name="search_term_string"
8       required/>
9     <input type="submit" />
10  </form>
11 </div>
```

Stuffing

- Meta keywords
- Meta description

Hidden

- Text on page

Cloaking

- Showing different pages to engines than to humans

- Websites need to be machine-friendly
- Add meta elements and markup to your page templates
- Test your site's SEO, and iterate

- DigitalGov Search Basics:
 - Thursday, March 30, 2017, 2:00 PM - 3:00 PM EST
 - Held Bimonthly
- April - Indexing your content directly with DigitalGov Search
- June - Data driven search design
- October - TBD
- Video recordings available on our website

search@support.digitalgov.gov | 202-505-5315

<https://search.digitalgov.gov>

Thank you!