

Important HTML Elements

These affect how you show up in search results



Best Practices

Title Tag

```
<head>
  <title>Page Title</title>
</head>
```

- Best between 50–60 characters
- Important keywords near the beginning
- Well-written descriptions influence click-through rates (CTR)

Meta Description Tag

```
<head>
  <meta name="description"
  content="This is an example.">
</head>
```

- Best around 160 characters
- Each description should be unique
- Well-written descriptions influence click-through rates (CTR)

example.com ▾

Example Domain

Example Domain. This domain is for use in illustrative examples in documents. You may use this domain in literature without prior coordination or asking for ...

Image

```

```

- Providing image height and width improves page speed

Hyperlinks



Best Practices

Text Link

```
<a href="https://www.example.com/webpage.html">Anchor Text</a>
```

- Use "nofollow" for paid links and distrusted content
- Use "sponsored" for sponsored or compensated links
- Use "ugc" for links within user-generated content
- For image links, the alt attribute serves as the anchor text

NoFollowed Link

```
<a href="https://www.example.com/webpage.html" rel="nofollow">Anchor Text</a>
```

Image Link

```
<a href="https://www.example.com/webpage.html"></a>
```

HTTP Status Codes

200	OK/Success
301	Permanent redirect
302	Temporary redirect
404	Not found
410	Gone (permanently removed)
500	Server error
503	Unavailable (retry later)

Webmaster Tools

Google Search Console
search.google.com/search-console/about

Bing Webmaster Tools
bing.com/toolbox/webmaster

Yandex
webmaster.yandex.com

Canonicalization



Best Practices

Common Duplicate Homepage URLs

<https://www.example.com>

<https://example.com>

<https://www.example.com/index.html>

<https://example.com/index.html>

<https://example.com/index.html?sessid=123>

- Preferred URL = <https://example.com/>
- Place the following in <head> section to indicate preferred URL:

```
<link href="https://example.com/" rel="canonical" />
```

More information at [mz.cm/canonical](https://moz.com/canonical)

"URLs" next page >

URLs

Best Practices

Common URL Elements

<https://store.example.com/category/keyword?id=123#top>

1 2 3 4 5 6 7 8

- | | | | |
|-------------------|--------------|----------------|---------------------|
| 1. Protocol | 2. Subdomain | 3. Root domain | 4. Top-level domain |
| 5. Subfolder/path | 6. Page | 7. Parameter | 8. Named anchor |

- Choose shorter, human-readable URLs with descriptive keywords
- Exclude dynamic parameters when possible (see “Canonicalization” and “Pagination”)
- When possible, place content on the same subdomain to preserve authority

Recommended: <https://example.com/blog>
Less ideal: <https://blog.example.com>

Robots Exclusion Standard

Best Practices

Robots.txt

Location: <https://example.com/robots.txt>

```
User-agent: googlebot  
Disallow: /example.html  
Sitemap: https://example.com/sitemap.xml
```

More information at [mz.cm/robotstxt](https://moz.com/robotstxt)

- Only Meta Robots and X-Robots-Tag remove URLs from search results
- Don't block CSS or JavaScript files with robots.txt

X-Robots-Tag

Location: Sent in the HTTP headers

```
X-Robots-Tag: noindex
```

More information at [mz.cm/x-robots](https://moz.com/x-robots)

Important Parameters

- Noindex (do not index)
 - Nofollow (do not follow links)
 - Noarchive (do not show cache)
- ...or combine (noindex, nofollow)

Meta Robots

Location: In the HTML <head>

```
<meta name="robots" content="[PARAMETER]" />
```

More information at [mz.cm/x-robots](https://moz.com/x-robots)

If the robots <META> tag is not defined, the default is "INDEX, FOLLOW"

Don't block noindex URLs in robots.txt. They need to be crawled to be respected.

Important User Agents

For Robots.txt, Robots Meta Tags, and X-Robots-Tag:

- Googlebot (can be used as default for most Google crawlers)
- Googlebot-News
- Googlebot-Image
- AdsBot-Google
- Mediapartners-Google (Mobile Adsense) or Mediapartners
- Googlebot-Video
- Bingbot
- Yandexbot
- Baiduspider
- FacebookExternalHit
- Applebot
- Slurp
- Twitterbot
- Rogerbot
- Dotbot
- Wildcard for all robots: *

“Sitemap Syntax” next page >

Sitemap Syntax

XML Sitemap Example: RSS and text sitemaps are also options

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
  <url>
    <loc>http://www.example.com/foo.html</loc>
    <lastmod>2019-06-04</lastmod>
  </url>
</urlset>
```

Default Location: <https://example.com/sitemap.xml>

sitemap: parent tag for each sitemap

loc: location of the sitemap

lastmod: the last modified date

* A sitemap cannot contain over 50,000 URLs. Large websites should use multiple sitemaps listed under a single sitemap index file.

Sitemap Index File

```
<?xml version="1.0" encoding="UTF-8"?>
<sitemapindex xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
  <sitemap>
    <loc>https://example.com/sitemap1.xml.gz</loc>
    <lastmod>2019-01-01T18:23:17+00:00</lastmod>
  </sitemap>
  <sitemap>
    <loc>https://example.com/sitemap2.xml.gz</loc>
    <lastmod>2019-01-01</lastmod>
  </sitemap>
</sitemapindex>
```

Other Common Sitemap Types:

- Images
- Video
- News

* Don't forget to submit your sitemap to Google via Google Search Console.

Important Social Metadata

Sample Meta Tag Template: "Article" Place this data between the <head> tags of your website.

```
<!-- Required Open Graph data -->
<meta property="og:title" content="Developer's Cheat Sheet to SEO" />
<meta property="og:type" content="article" />
<meta property="og:image" content="https://example.com/image.jpg" />
<meta property="og:url" content="https://example.com" />
<!-- Optional Open Graph data -->
<meta property="og:audio" content="https://example.com/guide.mp3." />
<meta property="og:description" content="Description here." />
<meta property="og:site_name" content="Your Site Name, i.e. Moz" />
<meta property="og:locale" content="en_us" />
<meta property="og:video" content="https://example.com/guide.mp4" />
<meta property="fb:app_id" content="Your_FB_APP_ID" />
<!-- Find additional markup on https://ogp.me -->
```

```
<!-- Twitter Card data -->
<meta name="twitter:card" content="summary">
<meta name="twitter:site" content="@Moz">
<meta name="twitter:title" content="Title of content (max 70 characters)">
<meta name="twitter:description" content="Description of content">
<meta name="twitter:image" content="https://example.com/unique-image.jpg">
```

Mobile

There are 3 ways to implement a mobile website:

- Responsive web design (adjusts for screen size)
- Dynamic serving (serves different content based on a user's device)

⚠ Separate URLs (different URLs that serve mobile-optimized content). **Not advised.**

Check to see if your site is mobile-friendly:
[mz.cm/mobile-friendly](https://moz.com/mobile-friendly)



Best Practices

- Your mobile version should display the same content as your desktop site
- Page title tags & meta descriptions should remain the same
- Use the meta name="viewport" tag in the head of your page to tell the browser how to adjust the content. For example: <meta name="viewport" content="width=device-width, initial-scale=1.0">

Increase speed by optimizing the critical rendering path, using HTTPS & HTTP/2, eliminating render-blocking resources, removing unused CSS, and deferring offscreen images.

More information at mz.cm/mobile-seo



Best Practices

Default to Open Graph

Platforms that support Open Graph protocol include Facebook, Twitter, LinkedIn, and Pinterest.

Optimal Image Sizing

Twitter:

- Minimum 144x144 px
- No larger than 4096x4096 px or 5MB

Facebook:

- Minimum 600x600 px
- Try to use images that are at least 1080 px in width

More information at mz.cm/social-meta

Rich Snippets and Structured Data

Enhance search results and help search engines understand your content.

Common Vocabularies: schema.org

Popular Formats: JSON-LD, RDFa, Microdata

Breadcrumbs

[Home](#) > [About Us](#) > [Our Work](#) > [Success Stories](#) > Stories of Empowering Hikers

```
<script type="application/ld+json">
{
  "@context": "http://schema.org",
  "@type": "BreadcrumbList",
  "itemListElement": [
  {
    <---Repeat markup for additional list items--->
    "@type": "ListItem",
    "position": 1,
    "item": {
      "@id": "http://example.com/dinner",
      "name": "Dinner" }
    },
    <---Additional list items here--->
  ]
}
```

Reviews

★★★★☆ Rating: 3.5 - 401 reviews - Price range: \$11-30

```
<script type="application/ld+json">
{
  "@context": "http://schema.org/",
  "@type": "Review",
  "reviewBody": "The restaurant has great ambiance.",
  "itemReviewed": {
    "@type": "Restaurant",
    "name": "Fine Dining Establishment"
  },
  "reviewRating": {
    "@type": "Rating",
    "ratingValue": 5,
    "worstRating": 1,
    "bestRating": 5,
    "reviewAspect": "Ambiance"
  }
}
```

Review stars won't show up in search results.

Common Structured Data Types:

- Local business
- Product
- FAQ page
- Article
- Person
- Recipes
- How to
- QApages

More information at mz.cm/rich-snippets

Security

When using `target="_blank"` to open a link in a new tab, make sure you're implementing

`rel="noopener"`

or

`rel="noreferrer"` to avoid exposing your website to a surface attack.

SSL certificates are table stakes today. Your website must have one.

Lighthouse (mz.cm/lighthouse) helps to identify these vulnerabilities (and more) in the audit.

"Targeting Multiple Languages" next page >

Targeting Multiple Languages

Help search engines understand your location/language targets.

URL Structures for Country & Language Targeting

ccTLDs (Country-Level Only): example.de

Subdirectories with gTLDs: example.com/de/

Subdomains with gTLDs: de.example.com/

rel="alternate" hreflang="x"

Annotate alternate language & region versions of content

HTML version in <head>

Each version must identify all versions, including itself

```
<link rel="alternate" hreflang="x-default" href="http://example.com/" /> (Specifies Default)
<link rel="alternate" hreflang="en" href="http://example.com/en/" /> (Specifies Language; English)
<link rel="alternate" hreflang="en-GB" href="http://example.com/en-gb/" /> (Specifies Language + Region)
```

Sitemap Version

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9"
  xmlns:xhtml="http://www.w3.org/1999/xhtml">
  <url>
    <loc>http://example.com/english/</loc>
    <xhtml:link rel="alternate" hreflang="de" href="http://example.com/deutsch/" />
    <xhtml:link rel="alternate" hreflang="en" href="http://example.com/english/" />
  </url>
  <url>
    <loc>http://example.com/deutsch/</loc>
    <xhtml:link rel="alternate" hreflang="en" href="http://example.com/english/" />
    <xhtml:link rel="alternate" hreflang="de" href="http://www.example.com/deutsch/" />
  </url>
</urlset>
```

Popular Languages

en English
es Spanish
zh Chinese
hi Hindi
ja Japanese

More language codes can be found at mz.cm/langcodes

Popular Regions

US United States
GB Great Britain
CN China
IN India
JP Japan

More region codes can be found at mz.cm/regcodes

"Performance" next page >

Performance



Page Speed

Page Speed Tips:

- Compress and minify your code
- Reduce page redirects
- Remove render-blocking JavaScript
- Use treeshaking
- Leverage browser caching
- Use a CDN
- Leverage preconnect, prefetch and preload
- Analyze your critical rendering path performance for additional opportunities in Chrome Dev Tools.

Test your Page Speed with:

Lighthouse: developers.google.com/web/tools/lighthouse

PageSpeed Insights: developers.google.com/speed/pagespeed/insights

GTmetrix: gtmetrix.com

WebPageTest: webpagetest.org



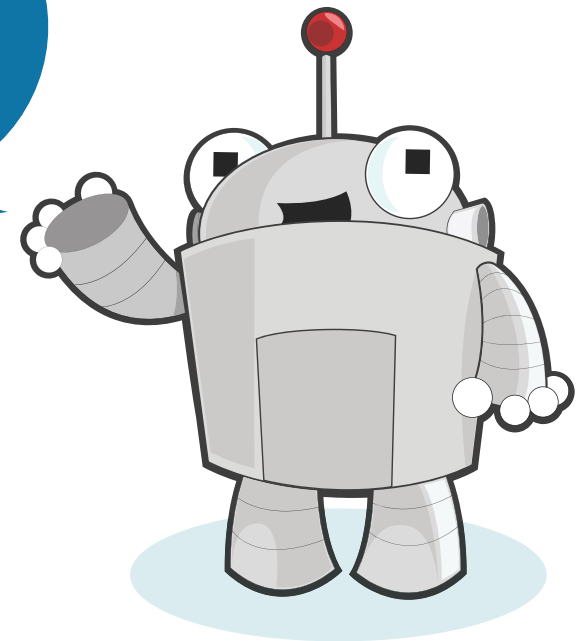
Image Optimization

The most common culprit of poor page speed is images!

Image Optimization Tips:

- Compress your images & experiment with quality settings
- Remove unnecessary image metadata
- Explore lazy loading
- Leverage SRCSET for different screen sizes
- Ensure that your images have alt text
- Invest in automated tools that can help ensure your image assets will always be optimized (example: mz.cm/imageopt)

Thanks for reading!



Modern JavaScript Sites

JavaScript Tips:

- Keep JavaScript bundles small (especially for mobile devices). Small bundles improve speed, lower memory usage, and reduce CPU costs.
- Use server-side or pre-rendering to improve site speed, user experience, and crawler accessibility.
- Stuck with client-side rendering? Try pre-rendering to help Googlebot get a more immediate HTML snapshot of your page.
- Use Chrome Dev Tools "Performance" tab to test your runtime performance and network "throttling" to simulate different device capabilities.

Explore Chrome DevTools' Timeline & JavaScript Profiler to analyze the impact of your JavaScript.