MOZ

The Web Developer's
SEO Cheat Sheet

Important HTML Elements

Title Tag

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

⭐ Best Practices

- ⭐ Less than 512px (50-70 characters)
- ⭐ Important keywords near the beginning
- ⭐ Each title should be unique

Meta Description Tag

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

- ⭐ Best under 155 characters
- ⭐ Each description should be unique
- ⭐ Well written descriptions influence click-through rate

Image

```
<img src="img/keyword.jpg" alt="keyword" width="100" height="100">
```

Hyperlinks

Text Link

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

⭐ Hyperlinking Best Practices

- ⭐ Preference: HTML links over JavaScript
- ⭐ Use "nofollow" for paid links and un-trusted content
- ⭐ For image links, the alt attribute serves as anchor text

NoFollowed Link

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

Image Link

```
<a href="https://www.example.com/webpage.html"><img src="/img/keyword.jpg" alt="keyword" width="100" height="100"></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)

More information at
http://mz.cm/HTTP-codes

Webmaster Tools

Google Webmaster Tools

https://www.google.com/webmasters/tools/home

Bing Webmaster Tools

http://www.bing.com/toolbox/webmaster/

Yandex Webmaster

https://webmaster.yandex.com/

Canonicalization

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

⭐ Canonicalized URL Best Practices

- ⭐ 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 http://mz.cm/canonical

URL 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

SEO Tips for URLs

- 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

Robots.txt
Location: https://example.com/robots.txt

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

More information at http://www.robotstxt.org/robotstxt.html

X-Robots
Location: Sent in the HTTP headers

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

More information at http://noarchive.net/xrobots/

Meta Robots
Location: In the html <head>

```
<meta name="ROBOT NAME" content="ARGUMENTS" />
```

More information at http://www.robotstxt.org/meta.html

⭐ **Robots Best Practices**

⭐ Only Meta Robots and X-Robots remove URLs from search results

⭐ Don't block CSS or JavaScript files with robots.txt

Arguments can be:

Nofollow (do not follow links)
Noindex (do not index)
Noarchive (do not archive)
NoODP (Do not show Open Directory Project description)
...Or combined (noindex, nofollow)

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

Important User Agents

For robots.txt, robots meta tags, and X-Robots-Tag

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

Sitemap Syntax

XML Sitemaps

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
    <url>
        <loc>https://example.com/</loc>
        <lastmod>2015-01-01</lastmod>
        <changefreq>monthly</changefreq>
        <priority>0.9</priority>
    </url>
</urlset>
```

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>2015-01-01T18:23:17+00:00</lastmod>
    </sitemap>
    <sitemap>
        <loc>https://example.com/sitemap2.xml.gz</loc>
        <lastmod>2015-01-01</lastmod>
    </sitemap>
</sitemapindex>
```

Default Locations Can Be:

https://example.com/sitemap.xml

https://example.com/sitemap.xml.gz

https://example.com/sitemap.gz

Other Common Sitemap Types:

- Mobile
- News
- Image
- Video

Pagination

- Use **rel="next"** and **rel="prev"** in the <head> section to indicate the relationship between paginated URLs

First Page - https://example.com/article

```
<link rel="next" href="https://example.com/article?pg=2">
```

Second Page - https://example.com/article?pg=2

```
<link rel="prev" href="https://example.com/article">
<link rel="next" href="https://example.com/article?pg=3">
```

Final Page - https://example.com/article?pg=3

```
<link rel="prev" href="https://example.com/article?pg=2">
```

More information at http://mz.cm/rel-next

Important Social Metadata

Sample Meta Tag Template: "Article"

Place this data between the <head> tags of your website

```
<!-- Open Graph data -->

<head prefix="og: http://ogp.me/ns# fb: http://ogp.me/ns/fb# article: http://ogp.me/ns/article#">

<meta property="og:title" content="Your Title Here" />

<meta property="og:type" content="article" />

<meta property="og:url" content="https://example.com/" />

<meta property="og:image" content="https://example.com/image.jpg" />

<meta property="og:description" content="Your Description Here" />

<meta property="og:site_name" content="Your Site Name, i.e. Moz" />

<meta property="fb:app_id" content="Your FB_APP_ID" />


<!-- Twitter Card data -->

<meta name="twitter:card" content="summary">

<meta name="twitter:site" content="Your @publisher_handle">

<meta name="twitter:title" content="Your Page Title">

<meta name="twitter:description" content="Your Page description less than 200 characters">

<meta name="twitter:creator" content="Your @author_handle">

<!-- Twitter Summary card images must be at least 120x120px -->

<meta name="twitter:image" content="https://example.com/image.jpg">
```

★ Social Metadata Best Practices

★ Default to Open Graph	★ Optimal Image Sizing

Platforms that support Open Graph protocol include:
• Facebook
• Twitter
• Google+
• LinkedIn
• Pinterest
	★ Choose large images over small
	★ Twitter:
	  • Minimum 120 x 120px
	  • No larger than 1MB
	★ Facebook:
	  • Minimum 200 x 200px
	  • Over 1200 x 630px recommended

More information at http://mz.cm/social-meta

Rich Snippets and Structured Data

Enhance search results and help machines to understand your content

Common Vocabularies	Popular Formats
★ schema.org • datavocabulary.org • microformats.org	★ Microdata • RDFa • JSON-LD

Breadcrumbs | Widgets › Large Widgets

```
<ol itemscope itemtype="http://schema.org/BreadcrumbList">
  <li itemprop="itemListElement" itemscope itemtype="http://schema.org/ListItem">
    <a itemprop="item" href="https://example.com/widgets">
    <span itemprop="name">Widgets</span></a>
    <meta itemprop="position" content="1" />
  </li>
› <li itemprop="itemListElement" itemscope itemtype="http://schema.org/ListItem">
    <a itemprop="item" href="https://example.com/widgets/large">
    <span itemprop="name">Large Widgets</span></a>
    <meta itemprop="position" content="2" />
  </li>
</ol>
```

Reviews | ★★★★★ Rating: 5.0 - Review by Roger Mozbot

```
<div itemscope itemtype="http://schema.org/Review">
  <div itemprop="itemReviewed" itemscope itemtype="http://schema.org/Book">
    <span itemprop="name">The Art of SEO</span>    </div>
<span itemprop="reviewRating" itemscope itemtype="http://schema.org/Rating">
    <span itemprop="ratingValue">5</span>
  </span> stars -
  <b>"<span itemprop="name">A good read.</span>" </b>
  <span itemprop="author">Roger Mozbot</span>
  <span itemprop="reviewBody">The Art of SEO is a good book.</span>
</div>
```

Common Structured Data Uses

Events	Recipes
Business Information	Media Content
People	Contact Data
Mobile Apps	Email Markup

More information at http://mz.cm/rich-snippets

Targeting Multiple Languages

Declare language attribute in the HTML element

```
<html lang="de">
```

URL Structures for Country & Language Targeting

ccTLDs (Country Level Only)	Subdomains with gTLDS
example.de	de.example.com/

Subdirectories with gTLDS

example.com/de/

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="de" href="http://example.com/de/" /> (Specifies Language)
<link rel="alternate" hreflang="de-DE" href="http://example.com/de-de/" /> (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		Popular Regions		
zh	Chinese	CN	China	More language codes can be found at http://en.wikipedia.org/wiki/List_of_ISO_639-1_codes
es	Spanish	US	United States	
en	English	IN	India	More region codes can be found at http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2
ar	Arabic	JP	Japan	
hi	Hindi	BR	Brazil	

Mobile Web Development

1 Responsive Design

- Place the meta viewport tag in the <head> of the document

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

- Uses CSS to alter the rendering of the page on the device using media queries

```
<link rel="stylesheet" media="(min-width: 700px)"
href="min-700px.css">

<style>
  @media (min-width:500px) and (max-width:600px)
  {h1{color:#555}}
</style>
```

2 Dynamic Serving via Vary HTTP Header

- Serves different HTML and CSS on the same URL, varied by user agent

```
HTTP/1.1 200 OK

Content-Type: text/html

Vary: User-Agent

Content-Length: 3495
```

(...rest of HTTP response headers...)

3 Separate URLs

- Identify mobile and desktop versions using rel="alternate" and rel="canonical"

Desktop page: http://example.com/

```
<link rel="alternate" media="only screen and (max-
width: 640px)"
href="https://m.example.com/"/>
```

Mobile page: http://m.example.com/

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