

## Important HTML Elements

Title Tag	★ Best Practices
<pre>&lt;head&gt;   &lt;title&gt;Page Title&lt;/title&gt; &lt;/head&gt;</pre>	<ul style="list-style-type: none"> <li>Less than 512px (50-70 characters)</li> <li>Important keywords near the beginning</li> <li>Each title should be unique</li> </ul>
Meta Description Tag	
<pre>&lt;head&gt;   &lt;meta name="description"     content="This is an example."&gt; &lt;/head&gt;</pre>	<ul style="list-style-type: none"> <li>Best under 155 characters</li> <li>Each description should be unique</li> <li>Well written descriptions influence click-through rate</li> </ul>
Image	
<pre>&lt;img src="img/keyword.jpg" alt="keyword" width="100" height="100"&gt;</pre>	

## Hyperlinks

Text Link	★ Hyperlinking Best Practices
<pre>&lt;a href="https://www.example.com/webpage.html"&gt;Keyword in Anchor Text&lt;/a&gt;</pre>	<ul style="list-style-type: none"> <li>Preference: HTML links over JavaScript</li> </ul>
NoFollowed Link	
<pre>&lt;a href="https://www.example.com/webpage.html" rel="nofollow"&gt;Keyword in Anchor Text&lt;/a&gt;</pre>	<ul style="list-style-type: none"> <li>Use "nofollow" for paid links and untrusted content</li> <li>For image links, the alt attribute serves as anchor text</li> </ul>
Image Link	
<pre>&lt;a href="https://www.example.com/webpage.html"&gt;&lt;img src="img/keyword.jpg" alt="keyword" width="100" height="100"&gt;&lt;/a&gt;</pre>	

## 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	★ Canonicalized URL Best Practices
https://www.example.com	<ul style="list-style-type: none"> <li>Preferred URL = https://example.com/</li> </ul>
https://example.com	<ul style="list-style-type: none"> <li>Place the following in &lt;head&gt; section to indicate preferred URL:</li> </ul>
https://www.example.com/index.html	<ul style="list-style-type: none"> <li>&lt;link href="https://example.com/" rel="canonical" /&gt;</li> </ul>
https://example.com/index.html	
https://example.com/index.html&sessid=123	More information at <a href="http://mz.cm/canonical">http://mz.cm/canonical</a>

## 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>
```

### Default Locations Can Be:

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

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

<https://example.com/sitemap.gz>

### 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>
```

### 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://moz.com/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

Platforms that support Open Graph protocol include:

- Facebook
- Twitter
- Google+
- LinkedIn
- Pinterest

#### ★ Optimal Image Sizing

- ★ 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

- ★ schema.org
  - datavocabulary.org
  - microformats.org

### Popular Formats

- ★ 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	de.example.com/
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		More language codes can be found at <a href="http://en.wikipedia.org/wiki/List_of_ISO_639-1_codes">http://en.wikipedia.org/wiki/List_of_ISO_639-1_codes</a>
zh	Chinese	CN	China	
es	Spanish	US	United States	
en	English	IN	India	
ar	Arabic	JP	Japan	
hi	Hindi	BR	Brazil	More region codes can be found at <a href="http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2">http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2</a>

## Mobile Web Development

### 1 Responsive Design

- Place the meta viewport tag in the <head> of the document
- Uses CSS to alter the rendering of the page on the device using media queries

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

```
<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/">
```