

# **SEO Cheat Sheet**

**Overview, Terms, & Best Practices**

# Overview

## What is SEO?

SEO, or Search Engine Optimization, is the practice of improving a website's visibility in search engine results pages (SERPs) through optimizing its technical aspects, content, and link popularity, aiming for higher rankings and increased organic traffic.

## Why Do We Need SEO?

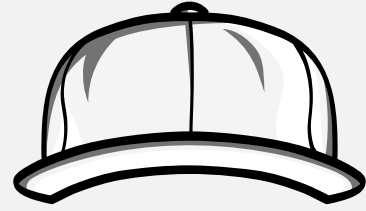
SEO is important because it can improve your organic visibility in search engine results pages. Which can translate to more brand awareness and website traffic. Which ultimately leads to more sales.

## How Does SEO Fit Into the Marketing Funnel?

SEO plays a crucial role in the marketing funnel by attracting organic traffic and guiding potential customers through each stage, from awareness to conversion.



# White Hat vs. Black Hat SEO



## White Hat

**Focuses on providing high-quality content and a positive user experience.**

**Examples include:**

- Creating original, valuable content.
- Optimizing website structure and speed.
- Using keywords naturally.
- Building backlinks from reputable sources.
- Aims for sustainable, long-term growth in search rankings.



## Black Hat

**Involves manipulative tactics to artificially boost rankings.**

**Examples include:**

- Keyword stuffing (overusing keywords).
- Cloaking (showing different content to search engines than to users).
- Using private link networks.
- Can lead to quick, short-term improvements in rankings, but these are often followed by penalties from search engines.

# Keyword Stuffing

## What is Keyword Stuffing?

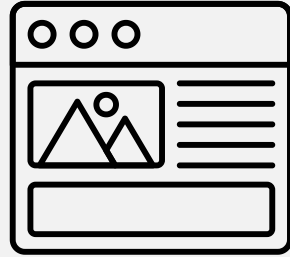
Keyword stuffing is the practice of intentionally and excessively repeating keywords or phrases within content, often in a way that sounds unnatural, in an attempt to manipulate search engine rankings.

## Why Should You Avoid It?

Google considers this a spam tactic and can negatively impact a website's ranking. Keyword stuffing is a type of black hat SEO.

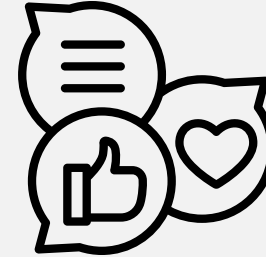


# On-Page SEO vs. Off-Page SEO vs. Technical SEO



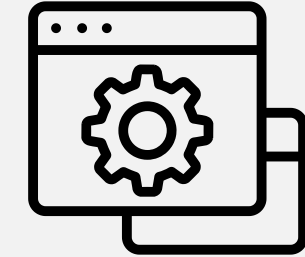
## On-Page

- Writing quality content
- Optimizing metadata such as: title tags, meta descriptions, alt text, h-tags, URLs, etc.
- Internal linking
- Optimizing images



## Off-Page

- Backlinks
- Social media backlinks
- Google My Business Profile (GMB)
- NAP Citations (Name, address, phone number)
- Reviews and Ratings



## Technical

- Sitemap
- robots.txt file
- Duplicate content management (canonical URLs)
- Page speed
- Structured data/Schema
- Responsive design
- Mobile-First indexing

# Backlinks

## What are Backlinks?

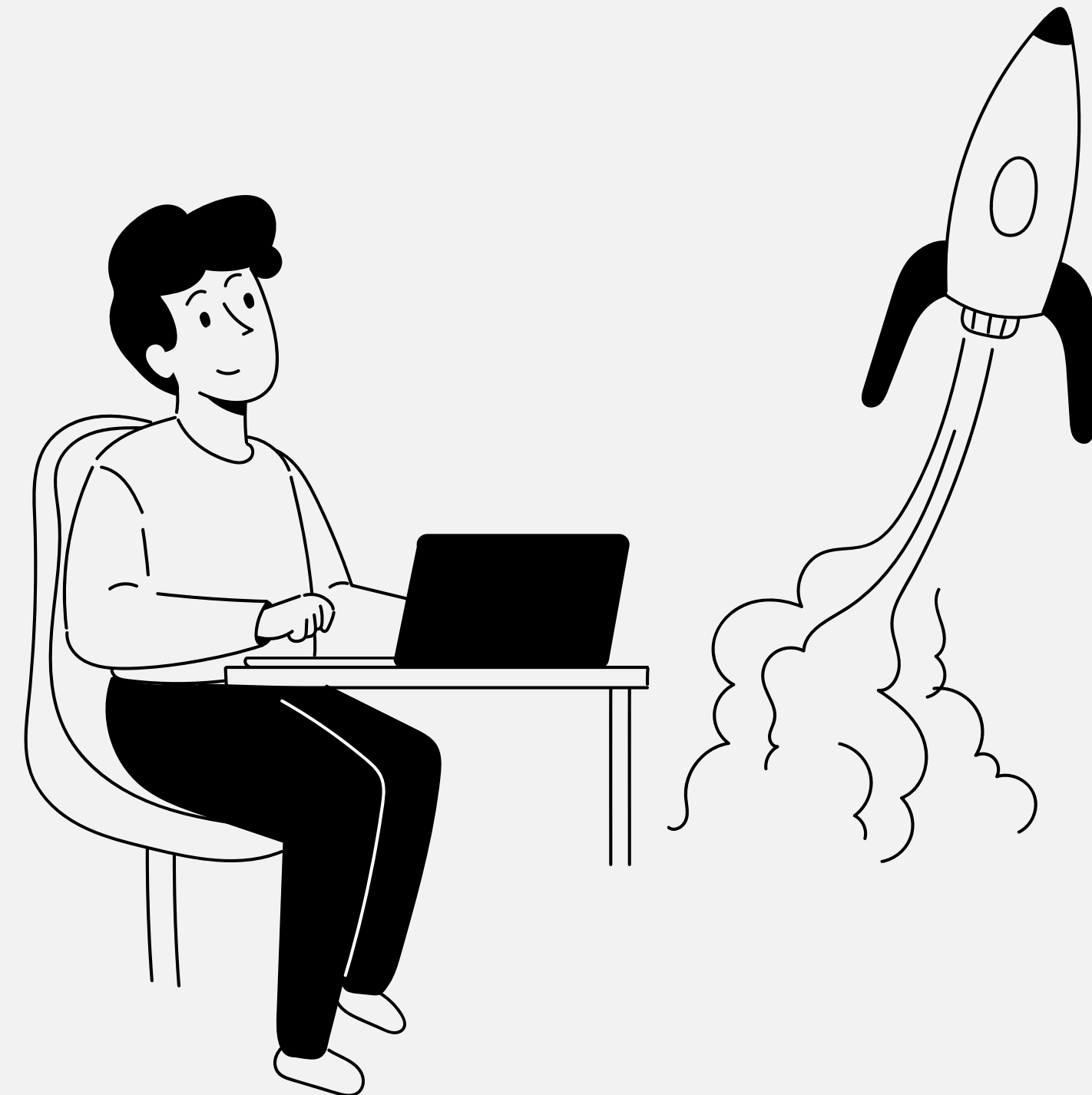
A backlink is when one website links to another with an anchor text.

## How Do Backlinks Help SEO?

Backlinks enhance SEO by signaling to search engines that your website is a valuable and authoritative source, potentially leading to higher rankings and increased organic traffic.

## Where Do Backlinks Come From?

Backlinks can come from many different places. Social media backlinks are some of the easiest to obtain since a company usually has more control over these links. Backlinks can also come from trusted partners, directory websites, or other websites. NSTXL's backlinks could come from our members, government partners, and OTA websites.



**Keywords**

# Keywords Overview

## What are keywords?

Keywords are the words or phrases that users type into search engines to find information, and they are strategically incorporated into online content to improve search engine rankings for those specific terms.

## Keyword Search Volume

Keyword search volume is a metric that shows how many times people search a specific keyword in search engines (like Google) each month.

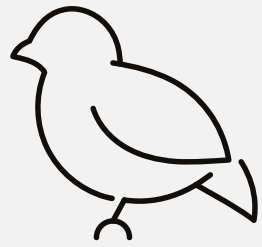
## Keyword Difficulty

Keyword difficulty is how competitive a keyword is and, therefore, how challenging it's likely to be to rank for it.

## Target Keywords with High Search Volume, and Low Difficulty



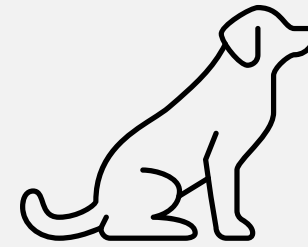
# Short- vs. Medium- vs. Long-Tail Keywords



## Short-Tail

“Fat Head”  
1-2 Words

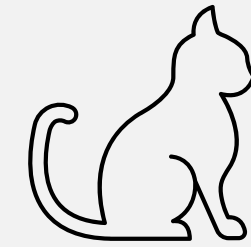
- Broader search terms
- Usually have very high search volume
- Often have highest difficulty
- Highest authorities rank for these keywords and don't change very often
- High CPC



## Medium-Tail

“Chunky Middle”  
3-4 Words

- More specific search terms
- Can have a wide range of search volumes
- Manageable difficulty
- Great to target for niche audiences
- Moderate CPC

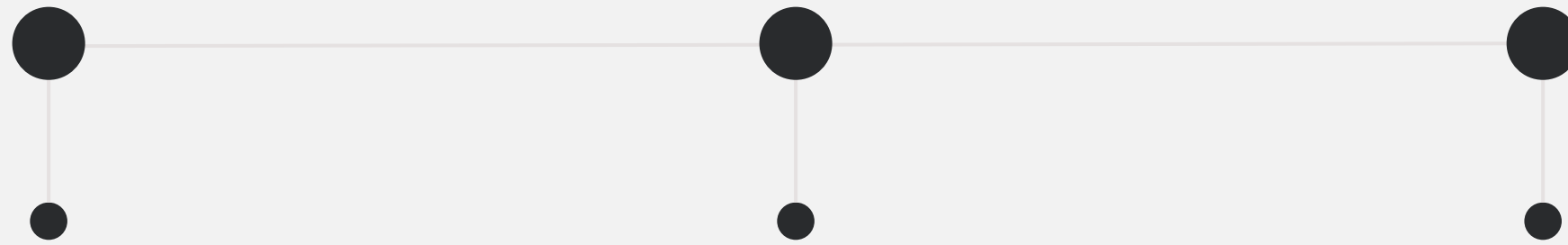


## Long-Tail

Often a short phrase  
5+ Words

- Very specific search terms
- Wide range of search volumes
- Usually are lowest competition
- Great for targeting specific needs or questions
- Usually low CPC

# Keyword Examples



## Short-Tail

“Fat Head”  
1-2 Words

- "sporting goods"
- "toys"
- "tax planning"
- "investment advice"

## Medium-Tail

“Chunky Middle”  
3-4 Words

- "running shoes for women"
- "best family cars"
- "travel destinations in Europe"
- "health benefits of yoga"
- "leisure centers manchester"

## Long-Tail

Often a short phrase  
5+ Words

- "best running shoes for beginners"
- "eco-friendly hotels in Los Angeles with a pool"
- "organic coffee shops near me"
- "best CRM software for small business"
- "best gym equipment for home workout"

# Metadata

# Metadata Overview

## What is Metadata?

Metadata is data that describes other data, in this case, the data of a webpage.

## Why is it Necessary?

it helps search engines process information on your page and understand the context of your content.

## How Do SEO Meta Tags Differ From Regular Meta Tags?

A meta tag is an HTML tag that provides structured metadata about a web page. An SEO meta tag, on the other hand, specifically refers to meta tags that are optimized for search engines to improve a web page's visibility and ranking in search results.



# Types of Metadata

## Title Tags

A title tag is an HTML element that defines the title of a webpage, appearing in browser tabs, search engine results, and link previews.

## Meta Description

A meta description is a short summary of a webpage's content that shows up on search engine results pages (SERPs).

## Canonical URLs

A canonical URL is the URL of a page that Google chose as the most representative from a set of duplicate pages.

## Header Tags

Header tags, also known as heading tags or h tags, are used to separate headings and subheadings on a webpage.

## Alt Text

Alt text enhances both accessibility and SEO. Screen readers interpret alt text to provide meaningful descriptions of images to visually impaired users.

## XML Sitemap

An XML sitemap is a file that lists a website's essential pages, making sure Google can find and crawl them all.

## robots.txt

A robots.txt file tells search engine crawlers which URLs the crawler can access on your site. This is used mainly to avoid overloading your site with requests.


## Structured Data (Schema)

Schema markup is microdata that you can use to help search engines parse and understand your website's information more effectively.

# Metadata on SERPs

Canonical URL<sup>1</sup>

Title Tag - 60 Characters or less

 [NSTXL](https://nstxl.org)  
<https://nstxl.org > emerging-technologies-in-defense-tec...> ⋮  
**[Emerging Technologies in the Defense Tech Industry ...](#)**  
Sep 24, 2024 – OTA vehicles such as S<sup>2</sup>MARTS and SpEC are flexible and efficient, capable of streamlining these emerging technologies into DoD utilization ...

Meta Description - 160 characters or less

<sup>1</sup> Canonical URL: <https://example.com/blog/>

Non-canonical (alternate) URL: <https://example.com/blog/?page=1>

# On-Page Metadata

Title Tag

**Emerging Technologies in the Defense Tech Industry Fueled by OTAs**

September 24, 2024



```
<img alt="Search results on GSC with the the box next to "Average position" checked and the "Queries" tab in the table highlighted." data-original="https://static.semrush.com/blo
```

Alt Text

Heading Tags

## About S<sup>2</sup>MARTS

The **Strategic & Spectrum Missions Advanced Resilient Trusted Systems (S<sup>2</sup>MARTS)**, managed by NSTXL, is the premier rapid OT contracting vehicle for the Department of Defense (DoD) in trusted microelectronics, strategic & spectrum mission, and other critical mission areas. The Naval Surface Warfare Center (NSWC), Crane Division created S<sup>2</sup>MARTS to grow and engage an elite network of innovators, shorten the path to defense prototype development, and advance national security efforts.

## About SpEC

The **Space Enterprise Consortium (SpEC)** was created in 2017 to bridge the cultural gap between military buyers and commercial space startups and small businesses through Other Transaction Authorities (OTA). The OTA innovative contracting process allows SpEC to solicit bids from a mix of member companies including companies that have not previously done work with the Department of Defense. SSC recently awarded management of the SpEC OTA to NSTXL to expedite the contracting between government and industry. NSTXL is focused on building a network of innovators and creators across the most sought-after emerging technology fields.

# Technical Metadata

## XML Sitemap nstxl.org/sitemap.xml

### XML Sitemap

Generated by **Yoast SEO**, this is an XML Sitemap, meant for consumption by search engines.

You can find more information about XML sitemaps on [sitemaps.org](https://sitemaps.org).

This XML Sitemap Index file contains 12 sitemaps.

Sitemap	Last Modified
<a href="https://nstxl.org/post-sitemap.xml">https://nstxl.org/post-sitemap.xml</a>	2025-03-28 11:26 +00:00
<a href="https://nstxl.org/page-sitemap.xml">https://nstxl.org/page-sitemap.xml</a>	2025-03-25 20:45 +00:00
<a href="https://nstxl.org/team-sitemap.xml">https://nstxl.org/team-sitemap.xml</a>	2025-03-27 14:57 +00:00
<a href="https://nstxl.org/tribe_venue-sitemap.xml">https://nstxl.org/tribe_venue-sitemap.xml</a>	2025-02-06 19:07 +00:00
<a href="https://nstxl.org/tribe_organizer-sitemap.xml">https://nstxl.org/tribe_organizer-sitemap.xml</a>	2022-10-12 16:36 +00:00
<a href="https://nstxl.org/tribe_events-sitemap.xml">https://nstxl.org/tribe_events-sitemap.xml</a>	2025-03-26 21:05 +00:00
<a href="https://nstxl.org/avada_faq-sitemap.xml">https://nstxl.org/avada_faq-sitemap.xml</a>	2025-03-06 13:32 +00:00
<a href="https://nstxl.org/post_tag-sitemap.xml">https://nstxl.org/post_tag-sitemap.xml</a>	2024-05-27 13:06 +00:00
<a href="https://nstxl.org/fusion_tb_category-sitemap.xml">https://nstxl.org/fusion_tb_category-sitemap.xml</a>	2025-03-28 13:21 +00:00
<a href="https://nstxl.org/categories-sitemap.xml">https://nstxl.org/categories-sitemap.xml</a>	2025-04-01 17:48 +00:00
<a href="https://nstxl.org/tribe_events_cat-sitemap.xml">https://nstxl.org/tribe_events_cat-sitemap.xml</a>	2025-03-26 21:05 +00:00
<a href="https://nstxl.org/faq_category-sitemap.xml">https://nstxl.org/faq_category-sitemap.xml</a>	2024-07-25 14:26 +00:00

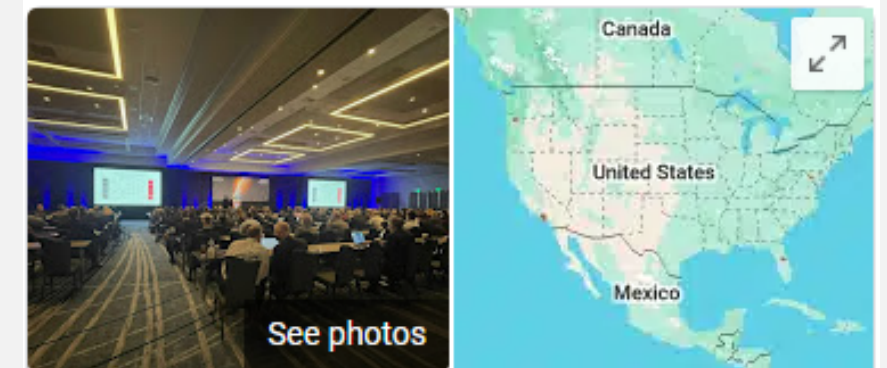
## robots.txt nstxl.org/robots.txt

```
User-agent: *  
Crawl-delay: 30
```

```
User-agent: *  
Disallow: /__esa  
Disallow: /__mesa/  
Disallow: /__xesa/  
Disallow: /__csup/  
Disallow: /__xsla/  
Disallow: /__xcusp/  
Disallow: /__xesa/  
Disallow: /__xsla/  
Disallow: /lp  
Disallow: /feedback  
Disallow: /langtest
```

```
Sitemap: https://www.cloudflare.com/sitemap.xml  
Sitemap: https://www.cloudflare.com/fr-fr/sitemap.xml  
Sitemap: https://www.cloudflare.com/de-de/sitemap.xml  
Sitemap: https://www.cloudflare.com/es-es/sitemap.xml  
Sitemap: https://www.cloudflare.com/pt-br/sitemap.xml
```

## Structured Data (Schema)



### National Security Technology Accelerator (NSTXL)

[Website](#) [Reviews](#) [Save](#)

[Share](#) [Call](#)

Phone: (800) 364-1545

Hours: Open · Closes 5 PM

# Technical Metadata Cont.

The image shows a screenshot of the Target website with three red boxes and arrows highlighting specific areas:

- Sitelinks:** A red box highlights the navigation menu items: "Women", "Shop All Categories", "Home : Furnishings & Decor", and "Furniture".
- Organization:** A red box highlights the "Organization" section on the right side of the page, which includes company information, contact details, and social media links.
- Products:** A red box highlights the "Latest from target.com" section, which displays three product cards: "Business Walrus: A Party Game By Clickhole", "2021 Panini NFL Chronicles Draft Pick Football Trading Card Mega Box", and "We're Pleased to Paws and Announce Kindfull, Target's New Pet Food Owned Brand".

Annotations include red arrows pointing from the labels "Sitelinks", "Organization", and "Products" to their respective highlighted areas.

Another Example of Structured Data (Schema)

# **SEO in Practice**

# Primary Keywords, Secondary Keywords, and Related Keywords & Phrases

How Often to Use in a 1000 Word Content Piece

## Primary Keywords

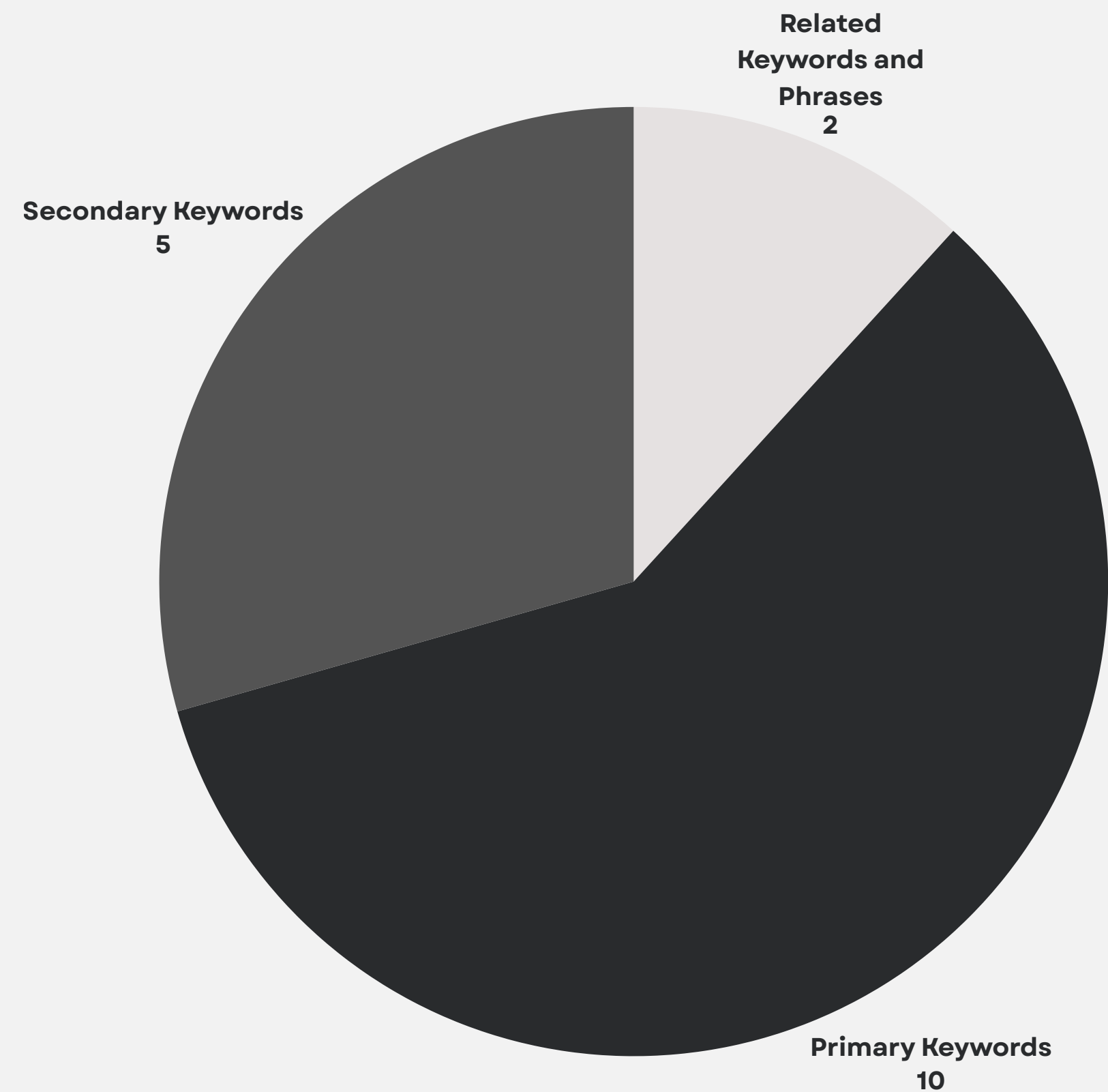
Primary keywords are 1 or 2 keywords that are the main keywords for your content piece. These keywords should be used most frequently in your content and be included in your metadata.

## Secondary Keywords

Secondary keywords are 2-4 keywords that support the main keyword(s). They should add content, help refine, and be closely related to the primary keyword(s).

## Related Keywords & Phrases

Related keywords or phrases are 3-10 keywords that are indirectly related to your main and secondary keywords. These keywords often speak to a broader intent but are not keywords you want to rank directly for. They should continue to refine and add content to your primary and secondary keywords.



# Structuring Pages and Blog Posts

## On Page:

### Heading 1 (Title Tag)



### Heading 2

**Anchor text** with internal links

### Heading 3

### Heading 4

### Heading 5

### Heading 6

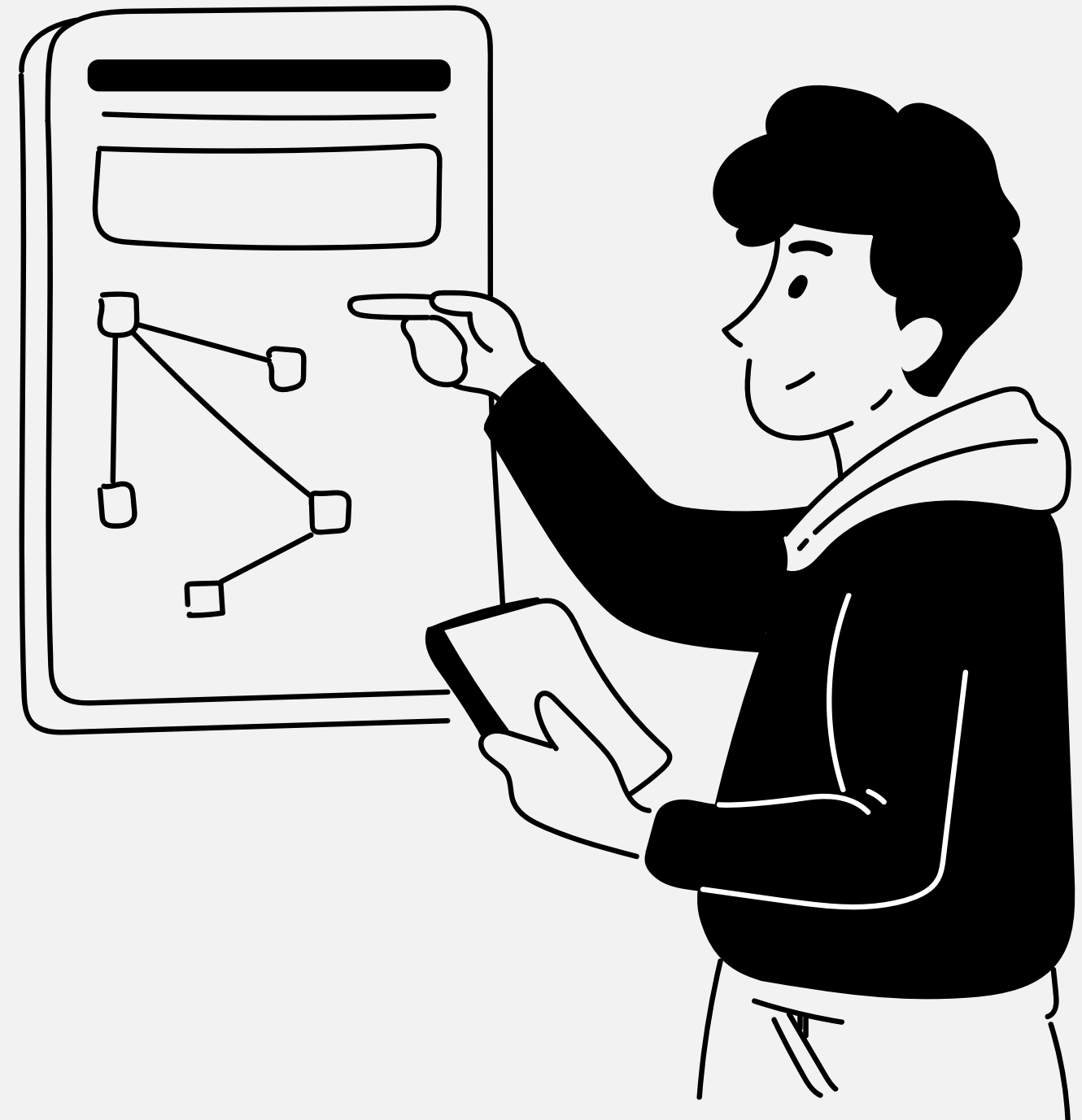
## Back End:

### Title Tag

Meta description

/optimized-url-slug

Image alt text



# Structuring URLs and Links

## URL Structure/Guidelines

As a general rule, URLs should:

- Be as short as possible while still being descriptive
- Contain dashes between words
- NEVER use underscores
- Contain keywords

**Good URL:** <https://www.site.com/how-to-drive-a-car>

**Bad URL:** [https://www.site.com/blog\\_post\\_12\\_21\\_2011](https://www.site.com/blog_post_12_21_2011)



## Internal and External Links

**Internal links** refer to links back to other relevant pages on the parent site.

**External links** are links that take the user to a site outside of the parent site. External links should ALWAYS open in a new tab.

**Anchor text** should always contain relevant keywords when possible.

**Good anchor text:** The supervising driver should teach you about important aspects of driving, such as [changing lanes](#), [how to check oil](#), [how to park](#), and [defensive driving](#).

**Bad anchor text:** A driving instructor [will be able](#) to help you learn to drive properly and adjust [what you do](#) incorrectly.

# Things to Keep in Mind

Keywords should always be included in:

- Title tags
- Meta descriptions
- Alt text
- Anchor text

Keywords should occur naturally in your content and should never be forced.

Avoid black hat techniques at all costs

Using Google's "People Always Ask" section is a great way to see related keywords and terms for content brainstorming



# Other Specifics for Google

## **EEAT Model**

EEAT stands for Experience, Expertise, Authoritative and Trustworthiness. While not a ranking factor, it is a component of Google's Search Quality Rater Guidelines.

## **Search Quality Rater Guidelines (SQRG)**

The Search Quality Rater Guidelines are a handbook for Google's roughly 16,000 contractors from around the world who review live and experimental search results. These Quality Raters score result pages according to page quality in terms of E-E-A-T and how well it meets the needs of the user's query.

## **Helpful Content System**

A framework introduced to make sure that high-quality, user-focused content receives the visibility it deserves in search results. This system uses a set of machine learning models to identify content that has been primarily created to help users, providing valuable information in a satisfying, easy-to-consume manner. This approach contrasts sharply with content that is overly optimized for search engines at the expense of real user engagement.