Google

Are you feeling lucky?

Google Search   I'm Feeling Lucky

Maximizing Efficiency Through Google Search
a module by **Aaron Hagenbüch**

In pursuit of the perfect search...

The purpose of this module is to maximize efficiency through Google Search. After navigating the provided materials, you will be able to identify and utilize advanced features within the search interface, and improve upon the quality of search results.

Are You Feeling Lucky?

If you go to www.Google.com, you will notice that there are two buttons under the search box: **Google Search** and **I'm Feeling Lucky**. Traditionally, when pressed, the second button does not provide you with a search result, but rather takes you to the very page that Google deems most relevant. This virtual roll of the dice, actually provides an interesting look into how Google weighs results, and can provide you with the questions that you should be asking, in order to reduce the time needed to generate the desired quality of listings on the search engine results page (SERP).

While the **I'm Feeling Lucky** button may be a clever throwback to Clint Eastwood's famous line in Dirty Harry, we ultimately do not want to rely on a guess to answer a question - our goal is to eliminate the element of luck from our online searches entirely.

Well, are you?

The **I'm Feeling Lucky** button is no longer enabled by default on www.Google.com. Once a you enter a query into Google, the auto-suggest feature (known as **Google Instant**), kicks in and effectively disables the option to use this feature. To enable the **I'm Feeling Lucky** button,
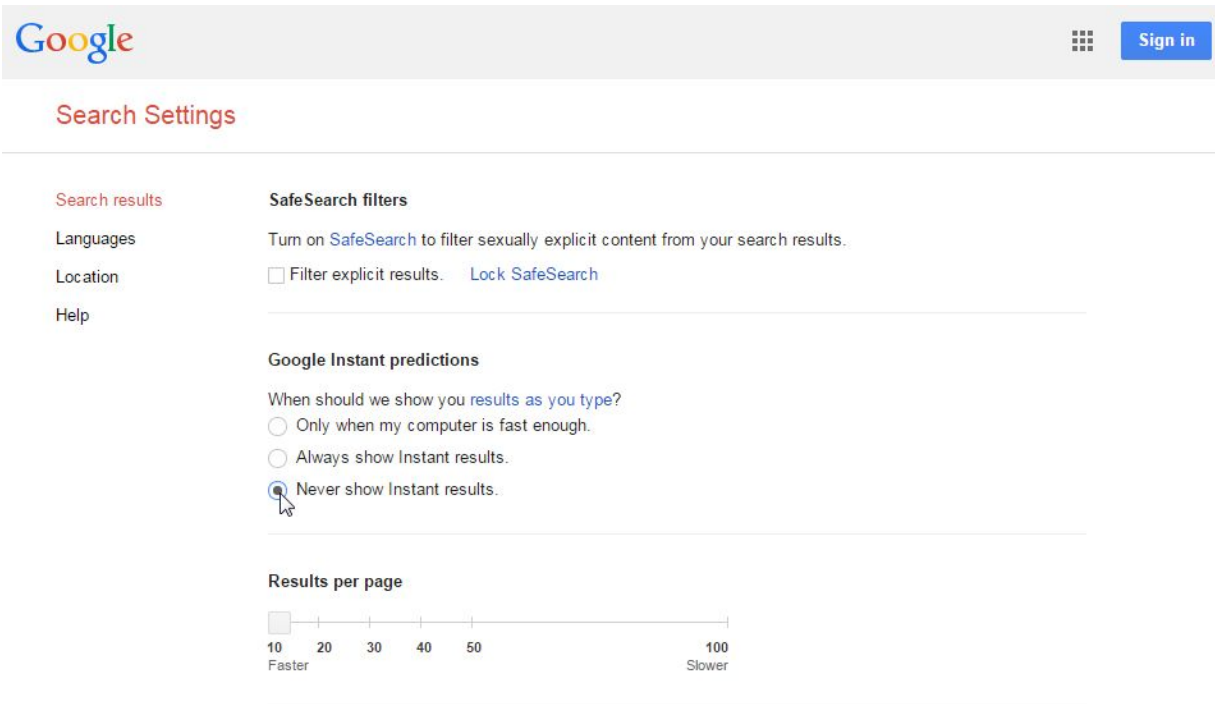
1. Complete a search
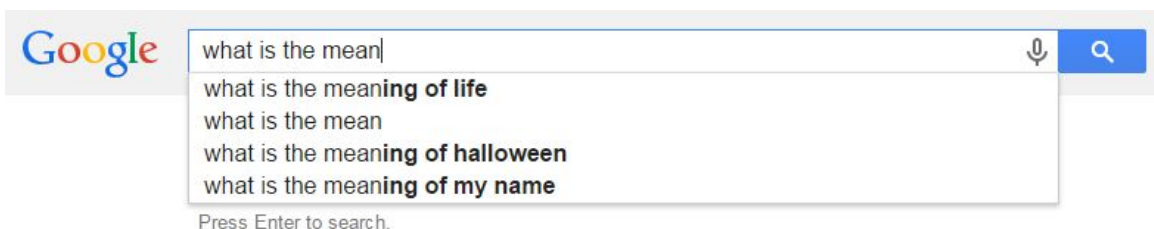
2. On the SERP, click on the **gear box** at the right of the page, and select **Search settings**
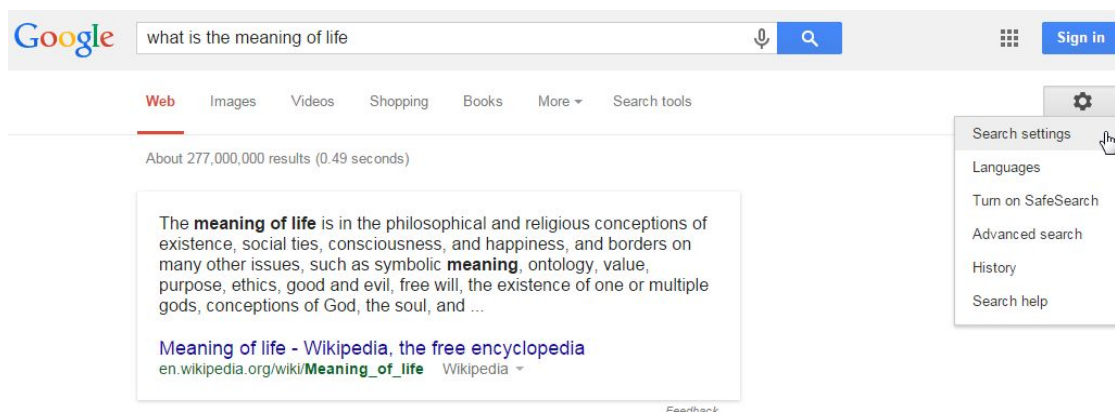
3. Under **Google Instant predictions**, select **Never show Instant results**

4. Click **Save** at the bottom of the page

Google will confirm that your preferences have been saved. Now when you go to www.Google.com and conduct a search, some Instant results may still appear - however you now have the option to click the **I'm Feeling Lucky** button.

5. You will now be sent directly to the location of the top search result

6. Conduct a search of your own. Enter the query, as well as the url in the space provided below

Search query:
URL:

What happened?

If you found what you were looking for, your search was descriptive enough to produce the exact result you were looking for. Congratulations!

In the case of searching for **the meaning of life**, we find that the Wikipedia entry for [Meaning of Life](#) was deemed most relevant by Google. However, in many academic pursuits, just as with many of life's pressing questions, we discover that there is no single answer, and more often than not, we must be very specific in order to produce results that have personal meaning to us. In the case of the Wikipedia result, it may be viewed as the most relevant, for its sheer volume of traffic, or through the inclusion of scholarly citation. This is why it is crucial to understand the importance of context, within each and every Google search.

Deriving Context

Context is what differentiates your search from somebody else's. It includes your background, location, the language you speak, your age, intellect, and individual motivation. Google attempts to determine the best results for you by creating a profile from logged in sessions based on your age, gender, language, and interests (if you are logged into Google, you can view yours [here](#)). By combining data provided through [Google+](#) and the websites you have visited, they serve catered results deemed most relevant to you, based on this criteria.

As one might imagine, the accuracy of these profiles can vary quite dramatically, and tends to coincide with the amount of information that one is willing to provide. This is why differentiating your search by applying **search modifiers** is so important.

Search Modifiers

Despite the name, search modifiers are simply extra words that can be added to a search string in order to reduce the number of irrelevant results. Product searches, are perhaps one of the easiest ways to demonstrate how effective search modifiers can be.

In Practice

Let's say you are in the market for a new laptop. Given the increased expense associated with such a purchase, it is not uncommon to cast a wide net and refine search queries over time, in order to determine exactly what you are looking for. One of the biggest search modifiers would be price, as this detail places limitations on what *is* and what is *not* a viable option.

Your debut search might look something like this:

best laptops under $500

In the above query, **under $500** would be a search modifier, as it eliminates options that cost more than the designated price. As you navigate the buying cycle and learn more about what you want, additional search modifiers will establish boundaries that ultimately narrow down options, in order to arrive at the best possible solution for you.

Incorporating your past experience with specific brands, the tasks you are looking to perform, and the features you require, all help to create a list of questions. Simply put, search modifiers will provide the answers to this list of questions, and effectively narrow the focus and clarity of your search results.

Some questions you might ask yourself when purchasing a laptop might include:

What brand of laptop do I want?
What operating system do I prefer?
How much memory will I need?
How much storage will I need?
Am I open to refurbished models?
What screen size do I want?

Create your own query and see if you can add any additional questions that might help you reduce the total of number of results that display.

Search query:
Additional modifiers:

Building the Long Tail

Once you are able to answer the questions necessary to determine what exactly you are looking for, your search will look quite different. As modifiers are identified, they are added to the query string in order to create what is known as a **long tail keyword search**. These expanded searches reduce the total number of results that display, and bring those with the highest relevance to the top of the page.

When looking at our original search for **best laptops under $500**, it soon evolves into something much more specific, with the inclusion of five additional search modifiers that identify brand, display size, processor type, memory, and storage capacity:

[ASUS] [15.6"] [AMD] [8GB] laptop [500GB] under $500

Now when we enter the search into Google and click the **I'm Feeling Lucky** button, we are taken to a Best buy product page featuring a laptop model with these exact features - but unfortunately, it is out of stock.

Though the result from Best Buy appears discouraging, all is not lost, for the result yields the following model number: **X552EADH42**. When we go back to www.Google.com and enter the model number into

the search box, the **I'm Feeling Lucky** button takes us to the same model available through [Amazon](#), and it includes free shipping.

Navigating the Search Funnel

Incorporating search modifiers and constructing long tail keyword searches is a process, and the steps of this process will vary depending on how complex your search is. This process can best be described as a **search funnel**. This concept represents the path that you take from awareness, to the point of purchase. Just as a funnel becomes more narrow as you near the bottom, so should the nature of the search queries.

If we outline the steps taken in this scenario, we see this in practice. With each additional search modifier added, Google yields fewer results, until we arrive at a single laptop model that meets all of the designated requirements:

Query	Modifiers	Results
best laptops	0	671,000,000
best laptops [under $500]	1	1,170,000
[15.6"] [AMD] laptop [under $500]	3	1,130,000
[15.6"] [AMD] [8GB] laptop [under $500]	4	990,000
[15.6"] [AMD] [8GB] laptop [500GB] [under $500]	5	848,000
[ASUS] [15.6"] [AMD] [8GB] laptop [500GB] [under $500]	6	727,000
X552EADH42	**0**	**17,300**

*Note the shape that the queries create. As the number of modifiers increase, the number of results decreases.

Negative Search Modifiers

While the dissection of the above search string focuses primarily on what the user wants based on their individual context, we also understand that knowing what you do not want, can be just as important. **Negative modifiers** are a simple way of reverse filtering options that you are not interested in. Just as regular modifiers are added to a search string to decrease the number of results, their negative counterparts can do the same. As the name would imply, negative modifiers include a minus sign (-) before a keyword that you do not want to include.

Going back to our expanded search, let's say you wanted the same specs, but did not know the brand of laptop that you wanted. In the past however, you had a bad experience with ASUS, and wanted to explore some alternative options.

ASUS 15.6" AMD 8GB laptop 500GB under $500

could be restated as

15.6" 8GB AMD laptop 500GB under $500 [-ASUS]

Notice that the specs remain the same, however ASUS laptops will no longer be included in the SERP, and the **I'm Feeling Lucky** search now directs us to the [Toshiba C55D-A5333](#) with the same features.

Note: Google has come a long way in mapping potential searches. Using specialized features such as the [Shopping](#) tab, is a great starting point for understanding the spectrum of available features and options within product searches. Be aware however, these are all sponsored listings, and only represent a small sample of available options. Advertisers also bid on the right to display here for related items, which can sometimes make utilization of this feature counterintuitive vs. creating your own search modifiers.

The Long Tail in Non-Product Searches

Though searching for a specific product may be the best way to demonstrate the need to focus on the context of searches as they relate to you, by filtering out options that are of no importance, long tail queries can easily be applied to everyday searches. In this section, we will look at how you can apply modifiers in order to generate long tail search queries for image, news, and video content.

Introductory Image Search

Have you ever seen a piece of art, a picture, or even a meme, without any text to provide insight into where it originated or who produced it? Long tail searches are effective at identifying visual elements with little or no reference to their point of origin.

Most people may recognize Vincent Van Gogh's famous painting [The Starry Night](#), however if the painter and the title of the piece was unknown, how would you go about searching it? Without using the artist or the title of the painting, see if you can generate five search modifiers that can help narrow down this painting if you were describing it to them:

1.	2.	3.	4.	5.

By incorporating elements of an image into your search, it is possible to find out. Without prior knowledge of the artist, the name of the masterpiece, or its associated fame, it really does help to try describing what you see.

Some questions you might ask yourself based on the image could include:

Is the image a photograph or painting?
What are the predominant elements of the image?
What colors are used?
Are there any clues that hint toward the time period?

From the image, we know we are looking for a painting. It includes a town, and the moon tells us that this is a night scene. There are blue hills under a blue sky, and in the foreground we have an unknown brown object.

The description allows us to extract modifiers necessary to construct the following long tail search:

painting of town and hills with brown object in foreground under moon and stars blue night sky

When we enter the above search into Google and click the **I'm Feeling Lucky** button, we find An Analysis on Vincent van Gogh's Starry Night.

Search by Image

In this digital age, it is quite possible that you first viewed an unknown image in a digital format. If you can save the image, you can upload it into **Google Image Search**, and the engine will match elements of the image up against others, in order to present you with potential matches. To utilize this search feature,

1. Go to **Google Image Search** and click on the **camera** icon
2. Choose whether you want to **paste image URL** or **upload an image** (note, drag and drop functionality is also enabled in this window)
3. Once entered, the SERP will display results that have this image within the page content, along with image variations that are visually similar.

Note: The box to the right of the search results is known as **The Knowledge Graph**. This displays quick facts based on the content of a search. Given the popularity of The Starry Night, Google automatically displays information about the artist, time period, genre, as well as the subject of the painting - which can also be used to generate potential search modifiers.

Advanced Image Search

Much like we observed during our search for the perfect laptop, we may want to narrow the focus of our search in order to produces fewer, more relevant results. This can be accomplished by adding filters through Google **Search tools**. To access these features,

1. Click on the **Images** tab, located underneath the search box
2. By default, results are sorted based on keyword relevance and site popularity. You can set additional parameters and change the way these listings are generated by clicking on the **Search Tools** button, located to the right of the **Images** tab
3. Once clicked, the following options will display: **Size**, **Color**, **Type**, **Time**, **Usage rights** and **More tools**
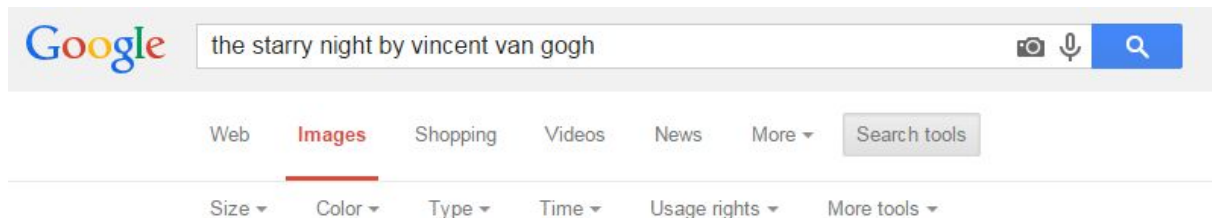
4. Each of these options will change the type of images that are displayed. The following grid highlights the options available under each menu item. Experiment with these features in the Google interface, and observe how they change the listings displayed.

Are You Feeling Lucky?

Take this opportunity to test your skills and see if you can answer the following questions based the image search information covered.

1. Though we know the painting and the artist, let's see how many questions can you generate based on the image search tools, in order to narrow your results? Feel free to incorporate the modifiers you created earlier to build relevance.

2. Construct your own revised long tail keyword search string with the modifiers generated, and take a screenshot of the SERP. Were you able to display on page one of Google?

"Diligence is the mother of good luck."
-Benjamin Franklin

Introductory News Search

Now that you know the name of painting, and have identified search tools that can refine image results, you can search for current information available for The Starry Night by Vincent Van Gogh. The **News** tab, as the name would imply, displays Google results categorized as news. These listings tend focus on recent and noteworthy information about current events from <u>verified</u> news sources vetted by Google. To access these results,

1. Click on the <u>News</u> tab, located underneath the search box
2. By default, results are sorted by relevance over the last 30 days. Just like your last image search, news listing priority can be modified by clicking on the **Search Tools** button, located to the right of the **News** tab
3. Once clicked, the following options will display: **All news**, **Any time**, and **Sorted by relevance**

4. Each of these options will change the type, age and priority by which news results are generated. The following <u>grid</u> highlights the options available under each menu item. Experiment with these features in the Google interface, and observe how they change the listings displayed.

Advanced News Search

If you have a specific site that you regularly receive news from, and you would like to find information on a given topic, you can utilize Google's **Site Search**. To use this feature,

1. Type **site:** into the search box
2. Without using spaces or prefixes, enter the site that you would like to search (**cnn.com**)
3. Now enter a space, and type the following query **the starry night by vincent van gogh**
4. Your end result should look like this: **site:cnn.com the starry night by vincent van gogh**
5. The results will filter out any listings that reside outside of the **CNN.com** website

Note: The **Site Search** feature is not limited to news, and can be used to search on any site. Because Google indexes pages, they have a record of all site content. In this case, the URL acts as a modifier and limits the results. The benefit of using this feature in Google allows you to use the advanced **Search tools** feature, despite the fact that internal site search may lack this functionality.

Are You Feeling Lucky?

Take this opportunity to test your skills and see if you can answer the following questions based the image news information covered.

1. Using the CNN.com site search instructions above and utilizing the search tools in Google, designate a custom date range to only view news results from November 1-30, 2014 (refer to the <u>grid</u> if necessary), copy and paste the link of the top result.

URL:

2. Read the article and create a search string by extracting search modifiers. Conduct a Google search, and see if you can get the same article to display at the top of the page without using the **News** tab. Take a screenshot and include the successful search string below.

Search query:

"In my experience, there's no such thing as luck."
-Obi Wan Kenobi

Introductory Video Search

If YouTube were a search engine, it would be second only to Google, however search results on this site will not yield content from other popular video sites such as Vimeo, Twitch, LiveLeak or Vine. With homegrown video becoming more popular, there is a benefit to utilizing Google Video Search, as it allows you to aggregate video results from all across the internet.

Instead of using the specific Google Video Search URL, results can also be accessed within the traditional search interface. To use this feature,

1. Click on the **Videos** tab, located underneath the search box
2. By default, results are sorted by keyword relevance, regardless of upload date. The way these results are generated can be modified by clicking on the **Search Tools** button, located to the right of the **Video** tab
3. Once clicked, the following options will display: **Any duration, Any time, Any quality, All videos, Any source**
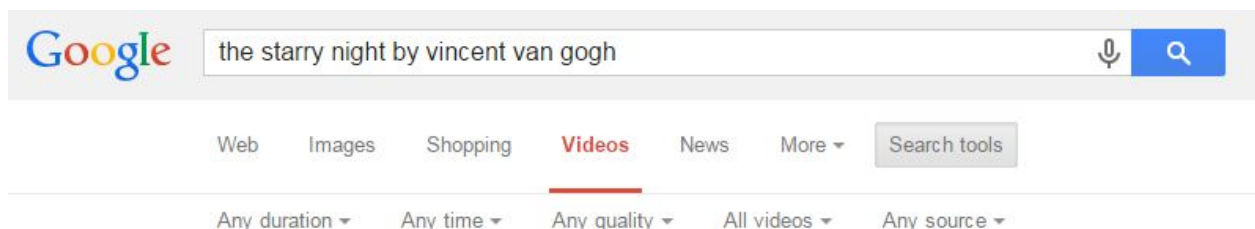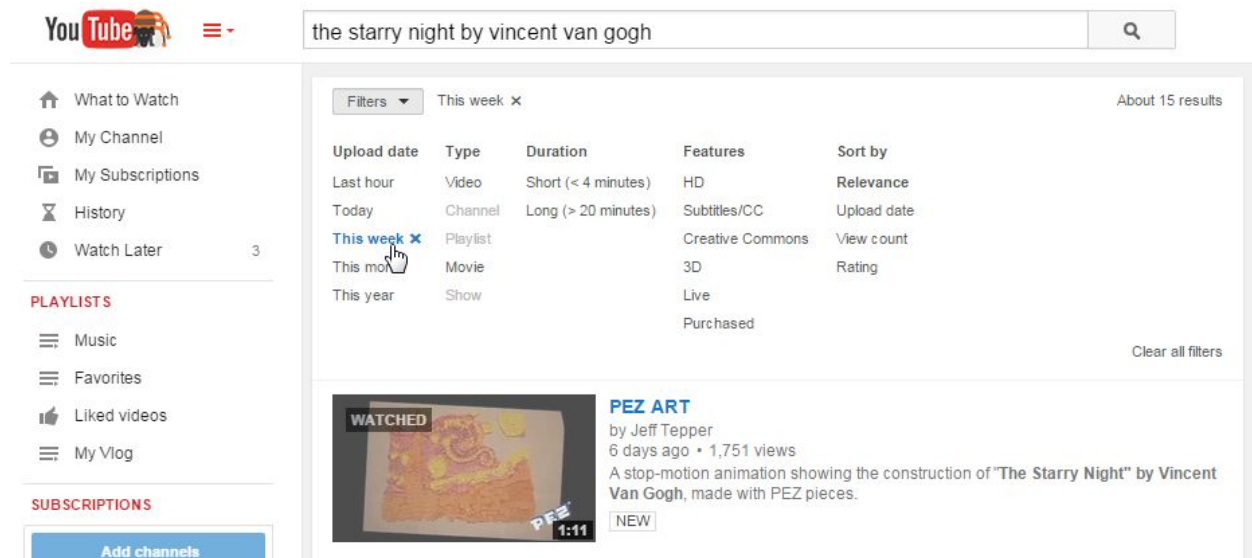

4. Each of these options will change the length, age, quality and source of the video results generated. The following grid highlights the options available under each menu item.

Experiment with these features in the Google interface, and observe how they change the listings displayed.

Advanced Video Search

If you didn't find what you were looking for, you may be searching for something very specific or relatively new. In this case, Google search results may fail to display the best results. YouTube has such a high volume of fresh content, and Google adds relevance to videos that have higher view counts and positive user ratings in its search results. Because of this, it is very possible that newer videos have yet to be indexed by Google - essentially making them invisible when using video search tools. To conduct an advanced search on YouTube, go to the site,

1. Type the starry night by vincent van gogh into the search box at the top of the page
2. The search results should look similar to those generated in Google. Underneath the search bar, click on **Filters**
3. Many of the filter options will mirror those we just covered, however when you click on **This Week**, you will notice several results that do not display in Google

Note: You can see that this feature is successful for keeping up-to-date on the latest results, YouTube's robust community provides some additional benefits, such as sorting videos by **rating** and **view count**. These are also forms of modifiers, even though they are likely unable to be incorporated into conventional searches on Google.

Are You Feeling Lucky?

Take this opportunity to test your skills and see if you can answer the following questions based the video search information covered.

1. Using the YouTube search filters on the following query, copy and paste the URL to the most viewed video of 2014.

2. In Google, using the following search string, make this video result appear at the top of the page by only using the search tools. Take a screenshot of the Google SERP and list the video search tools utilized (refer to the grid if necessary). What search tools did you use?

1.	2.	3.	4.	5.

"The best luck of all is the luck you make for yourself."
-Douglas MacArthur

The Nature of Google

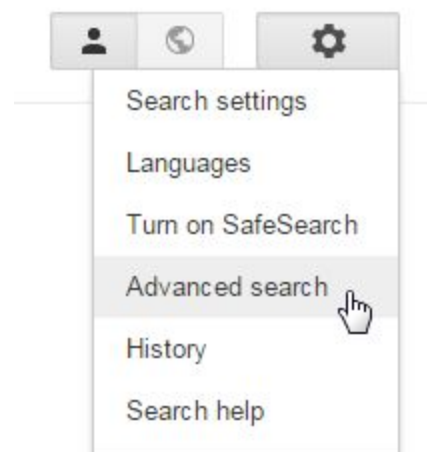While the I'm Feeling Lucky result can act as a litmus test to indicate *"the perfect search",* Google Instant does provide a unique benefit in helping assist in the search process by suggesting popular variations on introductory searches.

Because the Google algorithm adapts to and learns from user input, your newfound search techniques just might make your experience more fulfilling, as you become better equipped to tell the search engine what you want. Incorporating context through modifiers and creating long tail search queries are creating new keyword combinations every single time you use Google. So the next time you go to complete a Google search, you'll realize that luck has nothing to do with it.

Tip: If you ever find yourself struggling to generate a quality search result, Google does provide a broken down version of their **Advanced Search** outside of the main user interface. To access these features without the URL,

1. Click on the **gear box** at the far right of the SERP
2. In the drop-down, select **Advanced search**
3. Enter the appropriate prompt and search away!

Note: Google also provides little refreshers on how to use these features within the search interface, including prioritizing important words and using minus signs to exclude certain results.

Happy Searching!