

A Google Search Fly-By

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Google, as we all know, is a very powerful and useful search engine. Type in what you're looking for and *boom*—you find the information within the first page of the hundreds of pages of results. But despite Google's uncanny knack for finding just what you need, there are a number of techniques most people don't know about that allow you to further fine-tune your search to bring about more accurate results. Below are some of these techniques along with some information on some lesser known Google features.

Two notes before I begin: First, some examples are directly ripped from existing books on the subject. I did this partly because of my laziness and partly because, well, they're *good* examples. Second, all search query examples (things you can type into Google) will look like this. Alright, let's go.

Technicalities (some things you should know)

Before I begin, here are a few facts about the search engine I think are nice to know:

- All searches are case insensitive. This means searching for `apple pie` is the same as searching for `aPpLE PiE`
 - Google will automatically search for variants of the words you enter, such as plural and hyphenated versions of the word. So by searching for something like `apple pie`, you're also searching for `apples pies`, `apple-pie`, `apple-pies`, etc.
 - There is a maximum of ten keywords that you are allowed to enter in the Google search box. Any more than that, and Google will throw a hissy fit.
 - Small, common words like “the”, “a”, and “or” are ignored in a Google search (but there are ways to get around this, as shown later on).
 - The order of your keywords matters. Google places the most importance on the left-most word and the least importance on the right-most word, with shades of gray in between.
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Syntax

When most people search for something using Google, they might type something like `football scores` and expect to find the numbers of last night's game. Well, that person might get lucky and find them, or she might not. In the case that she does not, there's a handful of nifty things that can be done to the search query to find just what she's looking for.

Phrase Search

When you type in something like

```
football scores
```

into the search box, what Google actually does is look for web pages that contain the two words “football” and “scores” somewhere in the page. The words do not have to be next to each other. So, Google could return a page containing the text “The football match between England and France was fantastic. Scores of people attended...” If you were looking for who won last night’s *American* football game, this page probably wouldn’t help. For something more specific, you might want to try enclosing the query in double quotes as so:

```
"football scores"
```

This will look for that specific phrase in the page instead of specific words, so the words *do* have to be next to each other. But the word “football” is still kind of vague, so something like this might work a bit better:

```
"NFL scores"
```

Home on the range

Let’s say you’re doing a research project covering early 19th century New York . You want to search for pages about New York during the years 1800, 1801, 1802, and on and on up to 1850. Well, Google has a nifty feature that will let you do that. The query

```
1800..1850 "New York"
```

will search for pages with anything from 1800 to 1850 and the phrase “New York” in the page. Want to list all pages about pre-1850 New York? Try

```
..1850 "New York"
```

Similarly, you can look for pages containing information about post-1850 New York by typing

```
1850.. "New York"
```

Wishing on a star

Can’t think of a word but know its context? The asterisk (“*”) character represents just that. Say you want to know how many calories an apple has. Your first reaction might be to type in something like

```
"How many calories does an apple have?"
```

This, mind you, will search a web page for those exact words. You may find an answer with this, but a phrase more likely to appear on a web page would be something like “An apple has 55 calories.” So, you might want to change your query to something like

```
"An apple has * calories"
```

This will look for that specific phrase, with the asterisk being replaced by any word or number. Those familiar with command-line computing might be tempted to try something like

```
"An apple has 5* calories"
```

if they know for sure an apple has at least 50, but less than 60 calories. However, Google does not support partial matching like this. As an added bonus, using an asterisk doesn't count toward the limit of ten keywords per search (see Technicalities section).

Either you or you

Say you want to look for a page about either Ben Affleck or Mark Wahlberg, but you don't want a web page that has both the names mentioned. The OR keyword does just that. A query that will accomplish this is

```
"Ben Affleck" OR "Mark Wahlberg".
```

If you want to, you can replace "OR" with the vertical bar character "|". Either way works. For better results, you can enclose statements like these in parentheses and add additional keywords to the query like so:

```
douche ("Ben Affleck" OR "Mark Wahlberg").
```

This will search for pages that contain the word "douche" and contain either Ben's name or Mark's name. The reserved word "OR", mind you, must be in all caps; otherwise, it will be treated as a regular search keyword (and, in fact, ignored (see Technicalities section)).

Anything but *that*

Say you're looking for information on monkeys. You type the word into Google and find that a lot of the pages are about monkey defecation. "How obscene!" you think to yourself. "What is the internet coming to?" To help filter out these results, you might try something like

```
monkey -defecation.
```

The dash ("-") character means "not", so Google will search all pages that have the word "monkey" but which do not have the word "defecation".

You know what I mean

But alas, despite your attempts to filter out the crude images, some web site designers aren't as educated as others and instead of the college-level word "defecation", they use preschool ones like "poo" and "potty". How does one filter the insanity? One could try searching

```
monkey ~-defecation.
```

The tilde ("~") character tells Google to look for words similar to "defecation" and the dash ("-") character, as explained in the previous section, tells Google to exclude all pages that contain those words. This example is a bit overloaded (with the usage of dash and tilde right next to each other), so here's a simpler example. Since there are many different words for "monkey", you could search for something like

```
~monkey -defecation.
```

This will bring up all pages that contain the word "monkey" or words similar to "monkey" and which do not contain the word "defecation".

Don't forget the little ones

As mentioned in the technicalities section, Google ignores small, common words like “the”, “a”, and “or”. If you really need to include a word like that in your search, put a “+” before it, such as in

```
+The Sixth Sense.
```

However, if the word is within double quotes, the “+” is not necessary, like with the query

```
"The Sixth Sense".
```

Operators

In addition to changes in syntax, you can add things called “operators” to your search. These either help you refine your search or give you access to additional Google features.

Search Operators

These operators can be used in conjunction with a normal Google search and can tell Google to look at specific web pages or at specific parts of web pages. You can access these features through the Advanced Search without having to memorize the operators themselves, but I find the memorization simpler (it saves a lot of mouse clicks, for one). I'll give a short description for each, followed by a short example when necessary.

<code>filetype:<extension></code>	Searches only files with a given extension (only supports certain files). <code>"censoring monkey defecation" filetype:pdf</code>
<code>site:<domain></code>	Searches a specific website. Domain can not include the “http://” part of the URL. Only works for domain names (e.g. “msn.com”, not “msn.com/help”). <code>site:amazon.com "How to use Google"</code>
<code>inurl:<text></code>	Search websites that have specific text in their URL. <code>inurl:amazon.com/help "ordering books"</code>
<code>allinurl:<keywords></code>	See above, except searches the URL for all the keywords in the rest of the search query. <code>allinurl:amazon help faq</code> is the same as <code>inurl:amazon inurl:help inurl:faq</code>
<code>intitle:<text></code>	Searches the title of web pages.
<code>allintitle:<keywords></code>	See above, same idea as allinurl.
<code>intext:<text></code>	Searches just the text of the web page. Excludes things like links and image alt attributes.
<code>allintext:<keywords></code>	See above, same idea as allinurl.
<code>inanchor:<text></code>	Searches the links' text you see in your browser, not the links' URL.
<code>allinanchor:<keywords></code>	See above, same idea as allinurl.

How is this stuff useful, you might ask? Well say you're looking for a book, but don't want to search Amazon. You might try

```
"book title" -site:amazon.com.
```

But that only excludes the United States' amazon site, not international sites like amazon.co.uk. So instead, you might want to try

```
"book title" -inurl:amazon.
```

Or maybe you only want to only search HTML pages and not script-like generated pages such as PHP or ASP pages. In that case, you might try

```
"i am anal" (filetype:htm OR filetype:html).
```

Sorry, that's all I got. But there are plenty of other uses for these things. Trust me. Check out some of the books I have listed under References for some more examples.

Feature Operators

Here are some other useful operators, but these aren't really search related. They, more or less, give you lists of things and generally cannot be used with a regular search or with the operators described above.

cache:<url>	Loads the cached page of the URL if Google has the page cached. <code>cache:espn.com</code>
define:<word>	Gives the definition of a word. <code>define:defecation</code>
info:<url>	Gives various information on the URL. <code>info:msn.com</code>
link:<url>	Lists all web sites which contain links to this URL. <code>link:cnn.com/some_article.html</code>
movie: <city, zip, anything movie related>	Gives movie listings for theaters in the area or information on movies themselves. <code>movie:19335</code> <code>movie:downingtown, pa</code> <code>movie:tom cruise</code>
phonebook:<phone number>	Searches for the address associated with the given phone number. <code>phonebook:7174771480</code> <code>rphonebook:7174771480</code> [residential addresses] <code>bphonebook:7174771480</code> [business addresses]
related:<domain>	Lists all web sites related to the given domain. <code>related:amazon.com</code>
stocks:<symbol, company name, etc>	Opens a page that lets you view various stock pages from various sites like Yahoo! and MSN. <code>stocks: MSFT</code> <code>MSFT</code> [this returns a basic run-down of the stock within a Google search page.]

weather:<city, zip code, or the like>

Gets the weather for a given address

weather:19335

weather:downingtown, pa

Calculator

In addition to all this, there's another handy feature built into Google search, called Google Calculator. Typing things like

`2+2/4`

will activate the Google Calculator and will find the answer (in this case, 2.5). It not only solves simple equations like that (as well as oober complex equations—see <http://www.google.com/help/calculator.html> for more info), but it also performs unit conversions. Entering things like

`5 grams in ounces`

will, in fact, give you an answer in the desired unit of measurement. It will even tell you

`the answer to life, the universe and everything.`

Adding an equal sign (=) at the end of the query forces the calculator into action, but isn't always necessary.

The Number game

There are a number of, well, numbers Google recognizes. All you have to do is type the number in and Google will either display the proper information or provide a link to an external page with the proper information. These numbers include:

- UPS, FedEx, and USPS tracking numbers,
 - VIN numbers,
 - UPC codes,
 - telephone area codes,
 - and some others I don't really think are important. See <http://www.google.com/help/features.html> for a complete list.
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Dissecting the Google URL

Whenever you run a Google search, you might notice the jumbled nature of characters in the URL. Well, here's a brief explanation of some of its more important parts, in case it looks like Greek to you. If there's an attribute in the following example that you don't see in your Google URL, feel free to add it manually to your Google URL. Just put a “&” followed by the variable name and value to the end of the URL.

`http://www.google.com/search?hl=en&q=%22foo+bar%22&num=10&safe=off`

1. hl=en

The language of the search interface. In this case, English (try `hl=xx-bork` or `hl=xx-piglatin`).

2. q=%22foo+bar%22

The search query (what you typed in the search box) being run. A percent symbol (“%”) followed by two number characters stand for a single special character (in this case a double quote (“”). A plus sign (“+”) represents a space.

3. num=10

The number of results per page. Allows anywhere from 1 to 100 results per page.

4. safe=off

Whether safe mode is on or off. Safe mode filters the naughty pages little Jimmy is too young to see.

Conclusion

That's about all I have for you concerning how to take advantage of Google's more advanced functionality. If you're confused after reading this, don't worry. Once you start actually using these things, you'll pick it up pretty quickly. For more information, check out the books and links I have listed in the References section below. They go into greater detail and a lot give more (and a lot better) search examples. Anyway, hope you enjoyed my fly-by. I'd love to know who is reading this thing and what you think of it, so please let me know at <mike.angstadt@gmail.com>. Ta-ta!

References:

- [Google: The Missing Manual](#) (2004) by Rael Dornfest and Sarah Milstein
- [Google Hacks, 2nd Edition](#) (2004) by Tara Calishain and Rael Dornfest
- <http://www.google.com/help/features.html>

