For some very strange reason we have decided to look up "green cats" on the Internet. As we enter the string into our favorite search engine (Google in this example) and then click the Search button, the information is passed to a Google server farm somewhere. Where?

Who knows; it could be anywhere on the planet. But the power of the Internet is that we don't care as long as we get our results back quickly.

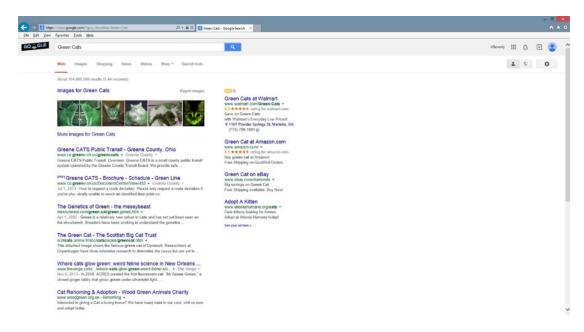


Figure 1-17. Green cats (11/12/14)

Okay, I must say I am amazed that there are 104 million possible links to green cats. Wow. Maybe we should have filtered that down some. The point, however, is that Google returns a web page with a listing of links and descriptions of those links (plus ads).

Did Google return a static page that already existed?

No. The servers created a *dynamic* page from the request of the user. The Google algorithms (software) searched the massive Google database farms. The request was first sent to a Google web server from the user's browser. The web server then sent a request to the Google databases (actually using a Google Query Language similar to SQL) to return information about "green cats". The software on the web server then compiled the results, added HTML and JavaScript (also some Google Script Language code) for formatting the results web page, and returned the information to the user.

Static vs. dynamic web pages—A static web page does not change in relation to user requests or input. The page is created by a web developer and resides on the web server. When the user requests the page via a browser, a copy of the page is sent to the browser for display. A dynamic page does not exist within a web server. The page is created using input from the user. A program residing on the web server will create and format the page. The page that is created by the program is then downloaded to the user's browser. A copy of the page is not (usually) maintained on the web server. For more information on static web pages visit http://en.wikipedia.org/wiki/Static\_web\_page. For more information on dynamic web pages visit: http://en.wikipedia.org/wiki/Dynamic web page.