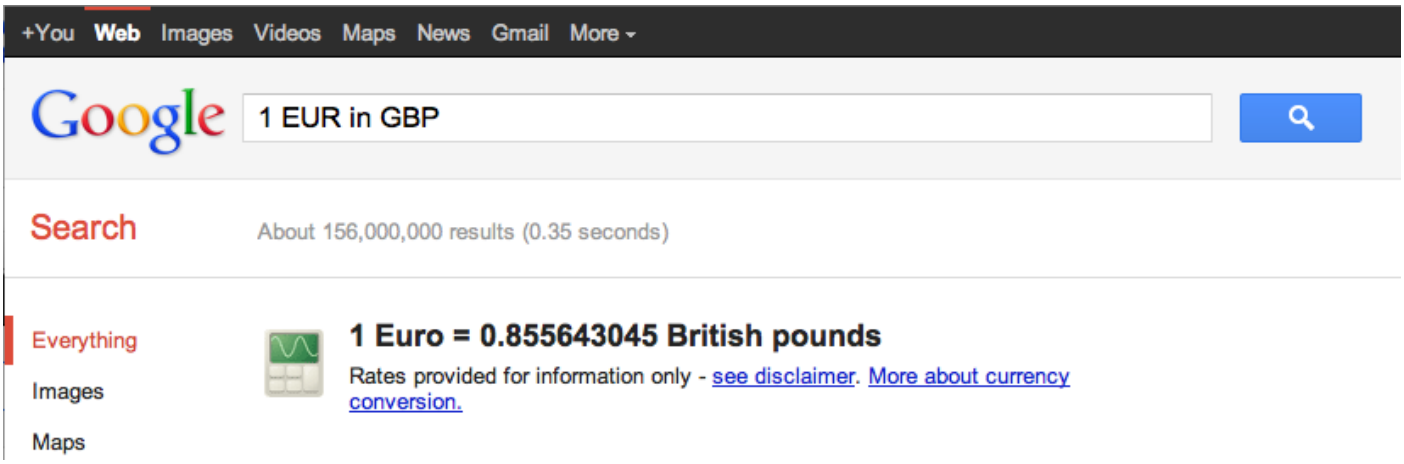
Testing, Testing, 1, 2, 3.

09 December 2011 · exploratory testing, google, pre-scripted testing

When I have a spare moment, I usually try and think about how to test something. In fact thats not true, what I do is actually test something. It might be an app on my phone, an online tool, parking-ticket machine or search engine. Usually it is what-ever is to hand, at the time. This is a good way to practice my skills, and can take as long as I have free. In fact having only moments is beneficial, you soon get better at finding out more issues - more quickly.

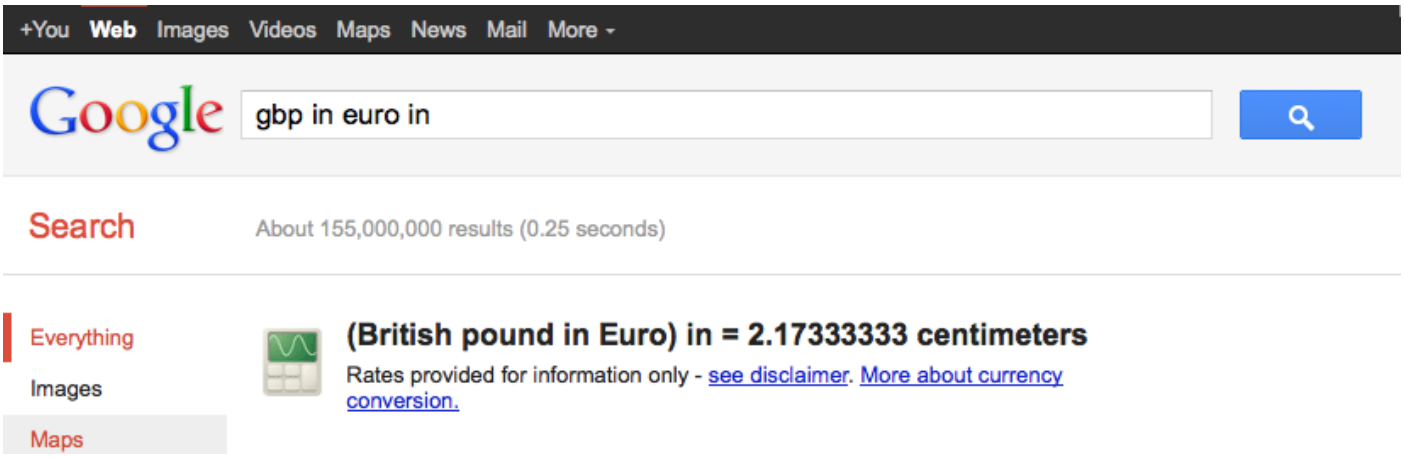
For example, a few moments ago I thought I'd test Google's currency converter. If you haven't seen it, it looks like this:



You enter a value and two currencies in the format shown, and Google will give you an answer with great precision. (I haven't examined the accuracy.)

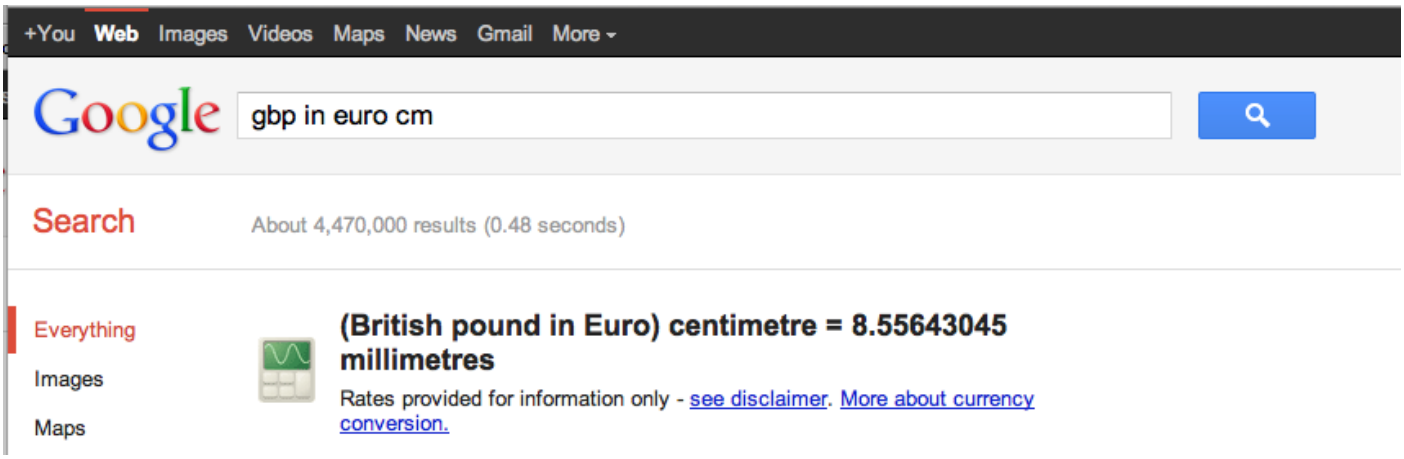
Starting from this I varied the text slightly, using "euro" instead of "EUR", also swapping "gbp" and "euro" to see how precedence affected the results. This seemed to behave as expected, but it did make me think about how Google was parsing the query. How might I confuse Google? Could I get it to misinterpret the order of the currencies?

Inspired by this question I tried typing:



This was actually the result of me pausing while typing, and observing the automatically updated search results presented by Google. I had [probably] confused the parser into trying to convert the result of my currency conversion into metric length measurements. This seemed like odd behaviour, but possibly acceptable to Google.

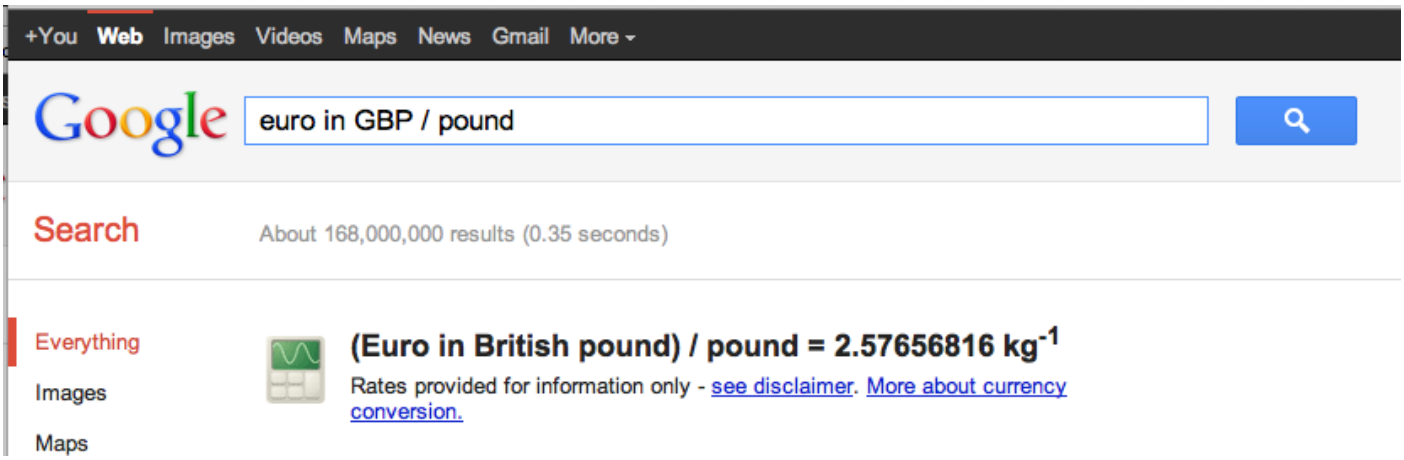
Next I checked how the search engine handles the reverse…



Rather than converting to Imperial measurements, Google has stayed metric, but displayed the result in millimetres. This started me thinking that this area had not been heavily tested - or at least had not been a focus for bug fixing. I'd found two unexpected behaviours, albeit slight, in seconds.

So how could I use this to highlight something that may confuse users or undermine the confidence that a user might have in this product. If this was my product, I'd want to know about such issues, as they might be bad for business.

The next thing I tried was deliberately aimed at being typical if not a semantically perfect query, that Google might misinterpret. I used the '/' character. Commonly used informally to mean English OR (http://en.wikipedia.org/wiki/Slash_(punctuation)#In_English_text).



This result was interesting. I can imagine a user typing this query, or copying similar text into Google. This seems like it would be a problem for some users, If only because its confusing. For many users it would seem Google is ‘broken’, especially those unfamiliar with imperial measurements. I’ll stop documenting the process there, but the leads generated in these quick tests suggest more avenues of investigation. Its clearly easy to confuse the search engine’s parser.

If I’d created these tests in advance, be that in a spreadsheet or test automation, how would I have jumped from one result to the next? By taking out the feedback-loop, I would have unlikely known to try those tests. I also would probably be still writing the tests, long after the point in time I had found the above information, and was on my way to finding more.