# PAGE RANK

Become part of the algorithm, discover its functioning by finding the most relevant pages by yourself!

## Where do Random Walkers meet?

Can an algorithm predict the most important pages of the web? Google's Page Rank can, and so can you! Page Rank estimates the probability of a web page to be visited by a user. It makes an evaluation of the most relevant pages based on their links with the other pages.

A "Random Walker" is also considered in the process: hypothetical "drunk" users of the web randomly moving between the pages, always ending up on the best linked ones. These are the most relevant pages and they will be the first results proposed by the search engine.

**Even if you move freely, all the links eventually lead to the most relevant pages. That's why Page Rank (PR), basing on the links' structure, is able to estimate the most popular pages where random walkers are more likely to meet.**

The ranking you obtained with the stickers is the same of the one in this layer. If you want to check mathematically, you can find the Page Ranks by solving the following proportion.

$$x : spRW = 1 : totRW$$

Where
**x** = Singlepage Page Rank (PR)
**spRW** = number of random walkers on a single page
**1** = sum of all pages' Page Rank
**totRW** = number of all random walkers

**Quality link**
Quality beats quantity!
This page has just one inbound link, but with the most relevant page of the network, explaining its high Page Rank.
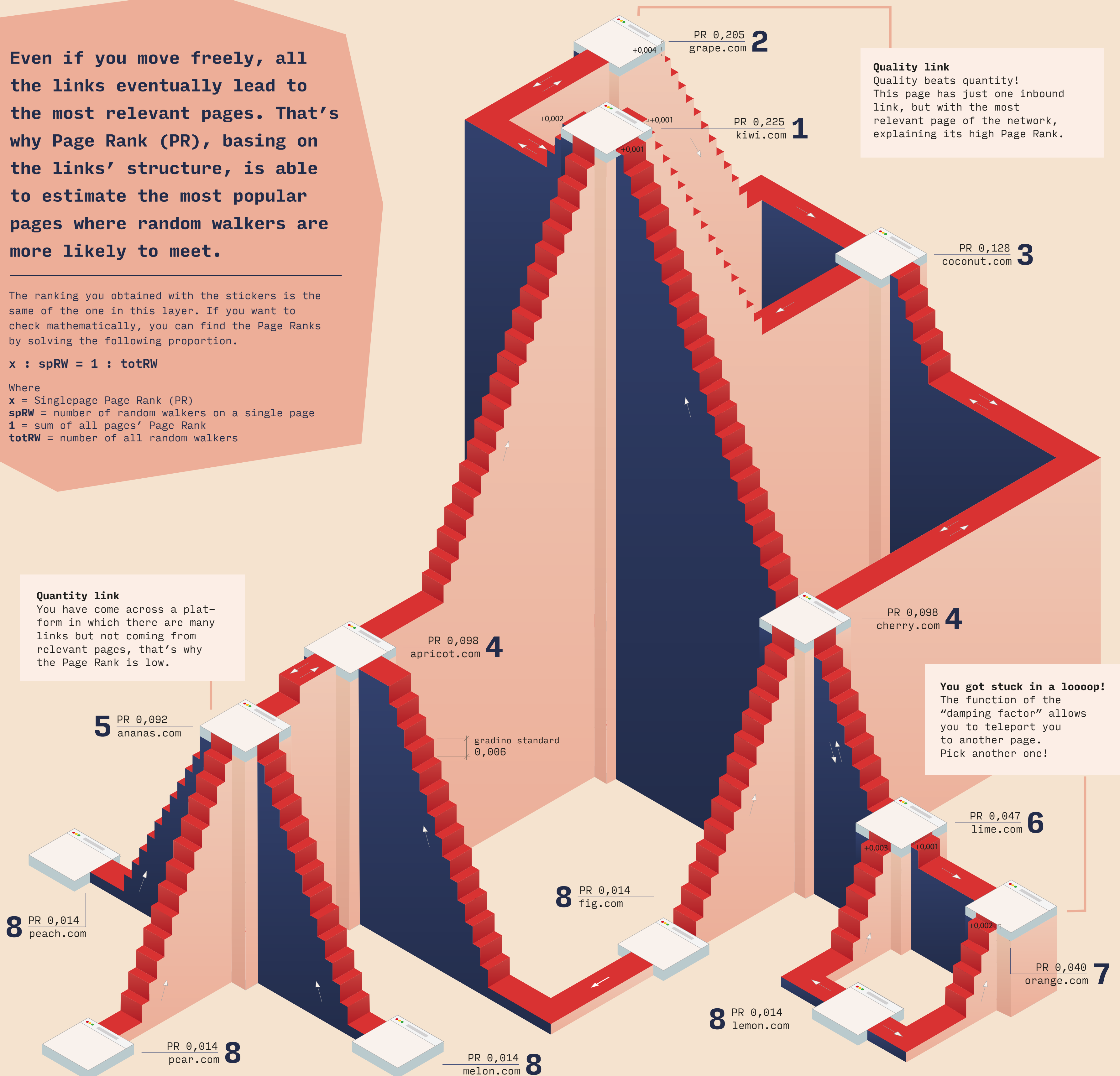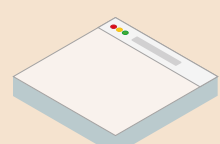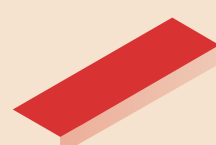
**Quantity link**
You have come across a platform in which there are many links but not coming from relevant pages, that's why the Page Rank is low.

**You got stuck in a loooop!**
The function of the "damping factor" allows you to teleport you to another page. Pick another one!

PR 0,205 grape.com **2**
+0,004

PR 0,225 kiwi.com **1**
+0,002  +0,001  +0,001

PR 0,128 coconut.com **3**

PR 0,098 apricot.com **4**

PR 0,098 cherry.com **4**

gradino standard 0,006

**5** PR 0,092 ananas.com

PR 0,047 lime.com **6**
+0,003  +0,001

**8** PR 0,014 fig.com

**8** PR 0,014 peach.com

PR 0,040 orange.com **7**
+0,002

**8** PR 0,014 lemon.com

PR 0,014 pear.com **8**

PR 0,014 melon.com **8**

**Legend:**     Web Page     Link     Link Direction     Random Walker