Google Maps algorithm: how it picks the fastest way? *

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Abstrakt

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Theme for the article will be Google Maps algorithms. To be accurate Dijkstra's algorithm and algorithm called A*, it will specify on how those algorithms picking the shortest and the fastest way possible. The process behind the user interface will be investigated.

I picked that theme because people often do not think about things they have nearby; however, it may occur to be something genius, just as the subject of my article's topic - Dijkstra's and A* algorithms. "Why are those lines of code so special? someone would ask. Boom of AI started 2 years ago, in November 2022, when OpenAI launched their ChatGPT; meanwhile, Google Maps were presented 19 years ago and already had a prototype of artificial intelligence in their project. Google Maps almost 20 years ago presented an algorithm which by choosing the shortest and fastest way helps, saves and supports people every day. Isn't it overwhelming?

Point of this article will be to expand on the history of the creation of Dijkstra's and A* algorithms, explain step by step how they work from a mathematical point of view, show the most critical parts of code and explain how it works and also talk about their drawbacks and ways of making them better.

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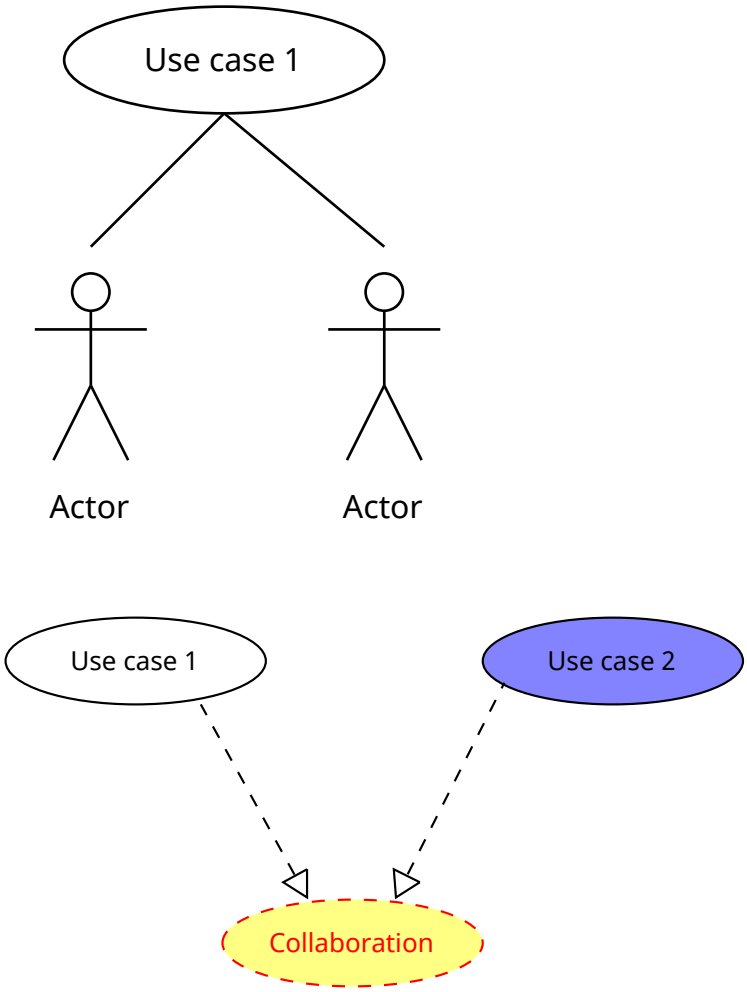
1 First one



Literatúra