

Personalised Search in Source Code

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Web is a very huge information channel, which provide a lot of text based web pages, pictures, videos or sounds. For finding information about this types of content, users use web search engines. Part of these users is group of programmers. More often they are searching content based on software development. This content can be in the form of source code. Web contains a lot of free source code repositories. Also, programmers, which are working for IT companies have often access to their own source code repositories. Programmers have more choices where to find inspiration, advice or some other solution of their development problems. Therefore, when programmers are trying to help themselves, it may takes a lot of time. This spent time is influenced by quality of personalisation. More information about programmer, means better search results and less time spent by programmer for searching.[1]

We would like to collect as much information about programmer as we can. For create quality user model, we need to resolve, which fact about programmers are relevant for us.

Every source code is referring to programmer, who wrote it down. We need them to build context profile, by retrieval names of source code authors(programmers). Except of getting source codes of some programmer, we can use technologies, which programmer learnt and has worked with them. Next we will evaluate knowledge score from specific domain model, all of the programmers.[2]

Programmer's user model should contains these attributes:

- ranked experiences
- backward searching queries
- ranked searching results
- programmer's activity in development enviroment
- programming languages, to which, is programmer able to understand

In this thesis we will analyse various methods for creating a user model of programmer, which take care about knowledges, experiences and abilities to write a

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code in programming languages, well-known by programmer. Next we will analyse various approaches for personalisation in source code, based on user model principles. We propose a method for creating programmer's user model automatically and usability in personalised searching in source code.

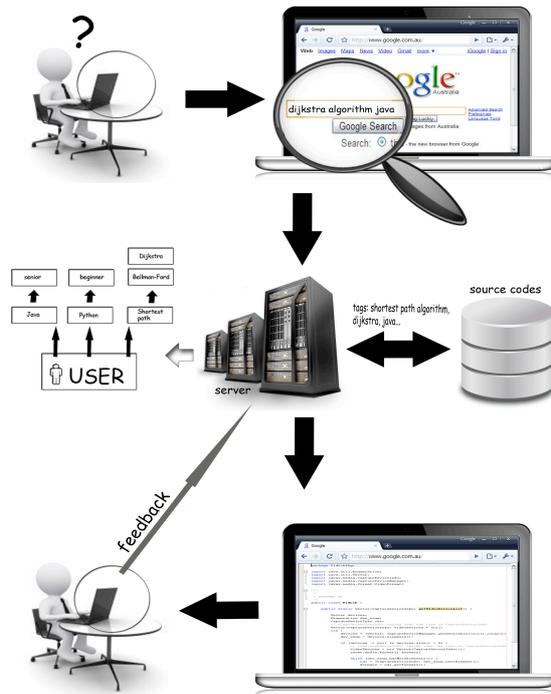


Figure 1. process of obtaining user information

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References

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