

Influencing factors in developers' code comprehension

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Long-term projects will inevitably face the problem of changing team members - especially in large development teams - and the neglect of certain components of the source code. Such projects tend to grow to a size where it becomes nearly impossible to know and understand the entire project. It is crucial to keep track of who is competent in each unit of the code in order to avoid information loss.

The contributions made by developers to the source code offer an obvious starting point when we try to map and quantify the software related knowledge of each developer. However, the contributions are diverse: apart from the quantity and significance of modifications, other factors also play an important role in code comprehension and software related knowledge, such as code reviews, pull request reviews, knowledge in documentation, or forgetting. In this talk, I present the different results derived from 3 important factors in code comprehension: the quantity and significance of modifications in the source code, and the inevitable forgetting.