## **Source Code History Interaction** Master's Thesis Topic

Programmers often develop source code iteratively. When introducing a new concept, they focus on the core functionality first. They then slowly add handling for edge cases, bug fixes, and performance improvements.

Because of the added textual complexity, the later iterations are a lot harder to understand. A simple way to access the earlier versions of a piece of code could greatly benefit understanding source code.

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	••	~	{
	{ if	{ Bug fix	if Performance
{	else Edge Case	else	else
	}	}	}

Your task would be to design a quick interaction method to access older versions of a document. This needs to work from within the text editor with no need to switch your focus to a different window.

You will solve the following problems:

- How do you find that one important change in a long list of changes?
- · How can you select a piece of text that you want to interact with?
- Is there a way to automatically gather some of the information about the history, and how do you display it? Your skills:
- · You did well in DIS 1 (participation in other i10 lectures is a plus).
- You like to do lots of prototypes.
- You have done some programming.

If you are interested in the topic please send a brief application with your CV to wittenhagen@cs.rwth-aachen.de.

