

Example Text for Qualitative Analysis

Interview Transcript of a Hypothetical Interview with a Developer about Refactorings

Q: Hello! Thanks for taking the time to answer some questions.

A: Hi! You are welcome!

Q: What do you know about the concept „refactoring“?

A: Well, I have read about it and discussed it with colleagues over time. My understanding of refactoring is that we clean up our code after we made functional changes to it.

Q: A common definition is that code refactoring is the process of restructuring source code without changing its behaviour with the purpose to improve non-functional attributes of the software. What do you think about this definition?

A: Yeah. I think that fits quite well. I guess we sometimes do change some things that change the software behaviour during a refactoring.

Q: Why do you also change behaviour?

A: If I realise during a refactoring that there is maybe a small bug or a little functionality that I can improve, I just do it.

Q: Please think about the last or current project you have been working on as a software developer. What refactorings have you used?

A: Let's see... I often use a rename refactoring. That's handy when I realise that I chose a bad name for a method or a class. Then I regularly extract methods to create smaller, more comprehensible methods. Sometimes, I also move methods in the hierarchy of the inheritance hierarchy. That's also a refactoring, right?

Q: Yes, that's called Pull Up or Push Down.

A: Right. I think that's it.

Q: Okay. I have some more refactorings. Have you used those: Extract Class, Encapsulate Field and Generalise Type.

A: No, I don't think so.

Q: Now for the refactorings you have used, have you applied the tool support in the IDE you use? Which IDE do you use?

A: We have as standard IDE Eclipse. I think, I have only ever done refactorings built into Eclipse.

Q: Why did you use only those?

A: I guess, I just remembered them. And I'm pretty sure that they won't destroy my code. (*laughs*).

Q: What motivates you to use refactorings at all?

A: I like that they are so automated. It helps me save time. And they are a systematic way for me to improve my code.

Q: What would it need for you to use other refactorings not implemented in your IDE?

A: Good question. I have never thought about that. I guess, I would need to be certain that I don't destroy some functionality. So a good unit test suite would be necessary.

Q: Good. Thanks a lot for your time! I will send you my transcript and ask you if I understood everything correctly. And of course, if you'd like, we will send you the final report of our study.

A: Yes, that would be nice. Good bye!

Q: Bye!

