



CODE REVIEW

WORKSHOP

DR. MICHAELA GREILER





Code Reviews

Superpower or expensive bottleneck

As a company that practices code reviews, you are well aware of all the benefits of this engineering practice. Not only do code reviews increase the quality, readability, and maintainability of your codebase, but also foster collaboration of team members, increase knowledge sharing, mentoring, and learning.

Still, code reviews also have their expensive drawbacks. In the worst case, code reviews drastically reduce the productivity of an engineering team, while yielding to questionable or mediocre code improvements at best.

I've seen too many companies suffer from the costly drawbacks of code reviews. Engineers spend a significant amount of time doing code reviews while experiencing pitfalls such as large reviews, long review times, insecurities on review approaches, and varying quality of code review feedback.

This workshop helps our engineers to implement a high-impact code review strategy by exposing them to proven code review best practices. After the workshop, it will be crystal clear to them how to effectively increase turn-around times while also ensuring high-quality review feedback.

Let your engineers learn from extensive research done by companies Microsoft, Google, and Facebook. Your engineers will get a rock-solid foundation on how to implement code reviews to ensure high productivity and high agility for your company.



Workshop Goal

Engineers know how to implement a high-impact code review strategy ensuring effective and fast reviews.



Code Reviews

Effective and Fast

This workshop is designed to ensure participants know how to implement code review best practices for effective and fast code reviews.

In this highly interactive remote sessions, participants get equipped with the latest research on and the best practices for code reviews. Second, through hands-on exercises and lively discussions and brainstorming sessions, participants identify bottlenecks in their own code review practices.

They learn about techniques to assess and measure code review performance and how to communicate code review benefits to colleagues. Finally, they actively work on solutions to improve their own, as well as their team's code review processes.

The workshop is led by Dr. Michaela Greiler, who is a code review expert, with over 8 years of experience analyzing and improving code reviews for engineering teams around the world. While working at Microsoft, she led product teams such as Office, Windows, and Visual Studio to improved and optimized engineering processes. As a trainer and independent consultant, she now works with companies such as National Instruments, MetroSystems, Flutter or Wix to boost their code review strategies and practices. She published her findings in highly reputable scientific publications. In these workshops, she shares her extensive knowledge of code reviews and process improvements.



Objectives and Outcome

At the end of the workshop participants are equipped with the knowledge to make code reviews their superpower, not their weakness.

They will know

- proven code review best practices from leading software companies such as Microsoft, Google, or Facebook;
- how to boost productivity and decrease review turn-around time;
- best ways to use code reviews for mentoring and knowledge sharing;
- how to give and get valuable code review feedback;
- friction and bottlenecks of their own and their team's practices;
- solution approaches to overcome those problems.
- Participants will also have internalized this knowledge through lively discussions, interactive sessions, exercises, and games.
- Finally, participants will have dived into their own code review processes, their specific bottlenecks, and frictions, and worked on solutions.

Who is this workshop for?

This training is for all who...

... already successfully practice code reviews and want to make them their superpower.

... experience code review pitfalls such as slow code review turn-around times, low feedback quality, unclear review guidelines, and want improvements.

... haven't started with code reviews, but want to learn how to best make use of this practice.

EXAMPLE SCHEDULE*

• DATE, TBD •

09:00- 9:30 Welcome and Introduction

09:30-10:30 Getting to fast, yet effective code reviews

- Understanding pitfalls and painpoints
- The science behind fast, impactful reviews
- Exercise: Breaking up large code reviews

break

10:50-12:00 The effective code review process

- Reducing the reviewer's burden
- The impact of tacit knowledge
- Exercise: Improving code review description

lunch break

12:50-14:20 How to boost code review feedback value

- Working with Code Review checklists
- What issues to look for in code reviews
- How to improve a team's feedback culture
- Exercise: Phrasing code review feedback

break

14:40-16:30 Collaboration and mentoring in code reviews

- Responding to feedback
- Handling conflict and toxic behavior
- The secrets behind high performing teams

* This schedule is for demonstration purposes only. Both, workshop times and topics might be subjected to change for the actual workshop.

Workshop Leader

Dr. Michaela Greiler



With a PhD from Delft University of Technology in Software Engineering and six years of experience improving software development processes at Microsoft, Dr. Michaela Greiler possesses both, thorough theoretical knowledge and extensive industry experience.

Over the last years, she conducted multiple large scale studies on code reviews, authored several articles in high-ranked scientific publications, and lead product teams to a more effective and efficient code review process. Her passion is to enable engineers to experience friction-less processes and overcome bottlenecks.

You can find out more about her work at michaelagreiler.com

Workshop Material

Michaela gives participants access to her slides, worksheets, and her exclusive code review e-book packed with case studies, background information, and the latest research.



Testimonials

"Michaela is a great example to show how beneficial innovation can be for software companies. Her ability to apply research findings to industry settings is impressive. I follow her work at Microsoft and her research with joy now for several years. Her research is innovative and solid. And she sure knows how to present research findings and complex concepts in a digestible way. She gave two keynotes for conferences I organized and each one of them was informative, dynamic and entertaining at the same time. She is on the top of my go-to list for outstanding speakers and I sure invite her for the next conferences and training I organize."

- Dr. Ana Paiva, Professor at the Engineering Faculty of the University of Porto

Michaela worked with:

- Microsoft Office, Exchange and SQL Server,
- Visual Studio, Windows,
- National Instruments,
- MetroSystems,
- Wix, Blip and many others.



What engineers say

"After attending the code review workshop, we were able to reduce the size of our code reviews and made the review process more consistent between projects."

- Marcus Österberg (Lead Frontend Developer, TeleClinic)

"Thank you for leading the workshop earlier in the week. I found it to be informative and engaging. It encouraged discussion in a relaxed environment, which was valuable to me since a lot of the colleagues attending were in orgs that have different practices."

- Ciro Nishiguchi (Chief Engineer at National Instruments)

"Perfect mix of theory, background, and practical. This is hard to get right!"

- Dave Cottlehuber (Software Architect at SkunkWerks)

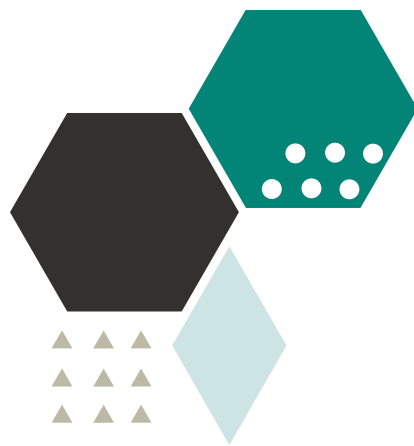
"Michaela is a great communicator and expert on the topic! I enjoyed the workshop in general, especially provided examples of good and poor code review feedback. If you are interested or want to know more about code reviews best practices I'd definitely recommend her!"

- Vasily Belolapotkov (Full-Stack Developer at Automattic)



Code reviews are either your engineers' superpower, or expensive bottlenecks.

You decide!



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