

A photograph of a desk setup. On the left, a small potted plant with green, feathery foliage sits in a dark, textured jar. Next to it is a desk lamp with a white, conical shade that is turned on, casting a warm glow. In the center, a laptop is open, its screen displaying a blurred image. To the right of the laptop, a pen and a small black object are visible on the desk. The background is a plain, light-colored wall.

WPCampus 2018

CODE IS POETRY — WHY CODE QUALITY REALLY MATTERS

Slides: <https://hsph.me/wpcampus18>



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GUILLAUME MOLTER

SENIOR WEB AND APPLICATION DEVELOPER

GMOLTER@HSPH.HARVARD.EDU

@GUILLAUMEMOLTER

The background of the slide is a close-up photograph of a blue, textured material, possibly a cable or fabric, with a white, curved object partially visible in the center. A red rectangular box is overlaid on the top right of the image.

CONTEXT

ABOUT QUALITY AND RELIABILITY



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CONTEXT

AGILE MANIFESTO - OVERVIEW



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AGILE MANIFESTO

- ▶ 4 foundational values
- ▶ 12 supporting principles

<http://agilemanifesto.org/>



AGILE MANIFESTO - 4 VALUES

- ▶ **Individuals and interactions** over processes and tools
- ▶ **Working software** over comprehensive documentation
- ▶ **Customer collaboration** over contract negotiation
- ▶ **Responding to change** over following a plan

AGILE MANIFESTO - 12 5 PRINCIPLES

- ▶ **Welcome changing requirements**, even late in development. Agile processes harness change for the customer's competitive advantage.
- ▶ **Deliver working software frequently**, from a couple of weeks to a couple of months, with a preference to the shorter timescale.



AGILE MANIFESTO - 12 5 PRINCIPLES

- ▶ **Working software is the primary measure of progress.**
- ▶ **Continuous attention to technical excellence** and **good design** enhances agility.
- ▶ **Simplicity**--the art of maximizing the amount of work not done--**is essential.**



CONTEXT OTHER CONSIDERATIONS



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THE COST OF BAD CODE

- ▶ Software failures cost \$1.1 trillion in 2016
- ▶ IBM: “The costs of discovering defects after release are significant: up to 30 times more than if you catch them in the design and architectural phase” **
- ▶ Karma and Happiness

WHAT IS GOOD CODE? DEFINING A GOAL



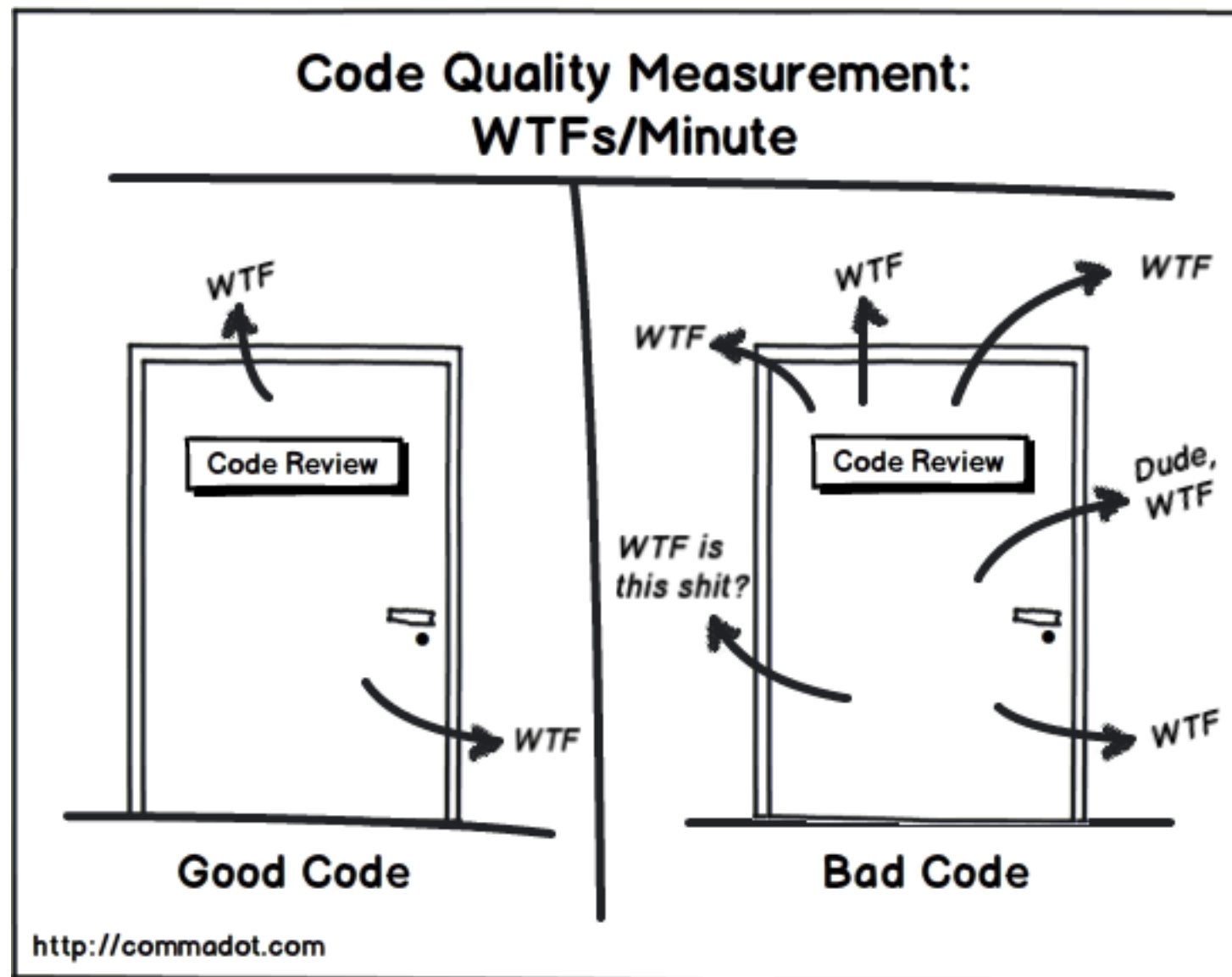
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GOOD CODE REQUIRES:

- ▶ Communication
- ▶ Experience
- ▶ To be reasonable



Robert C. Martin “Clean Code” > Thom Holwerda



WHAT IS GOOD CODE? CODE THAT:

- ▶ Works
- ▶ Is easy to understand
- ▶ Is easy to maintain
- ▶ Ships fast

CODE THAT WORKS

- ▶ Self testing
 - ▶ *Local dev with vvv or Docker*
- ▶ Automated testing
 - ▶ *Unit tests (PHPUnit)*
 - ▶ *Front-end testing (Selenium)*
- ▶ Code reviews

CODE THAT IS EASY TO UNDERSTAND

- ▶ Coding standards and conventions
 - ▶ *WPCS and PHP Code Sniffer*
- ▶ Naming
- ▶ Readability over “optimization/smart”

CODE THAT IS EASY TO MAINTAIN

- ▶ Architecture
- ▶ Build for the present design for the future
 - ▶ *Action and filter hooks*

CODE THAT SHIPS FAST

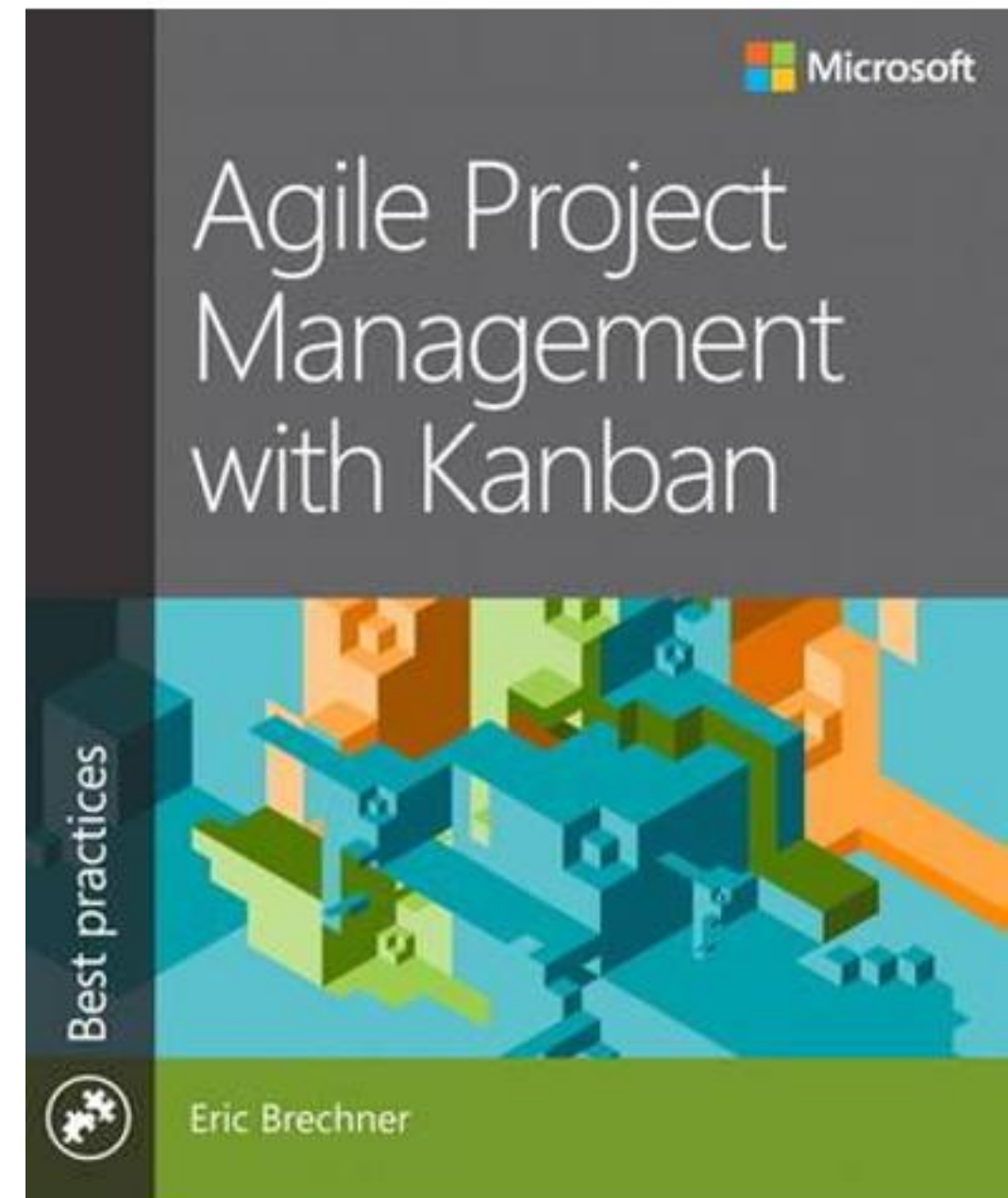
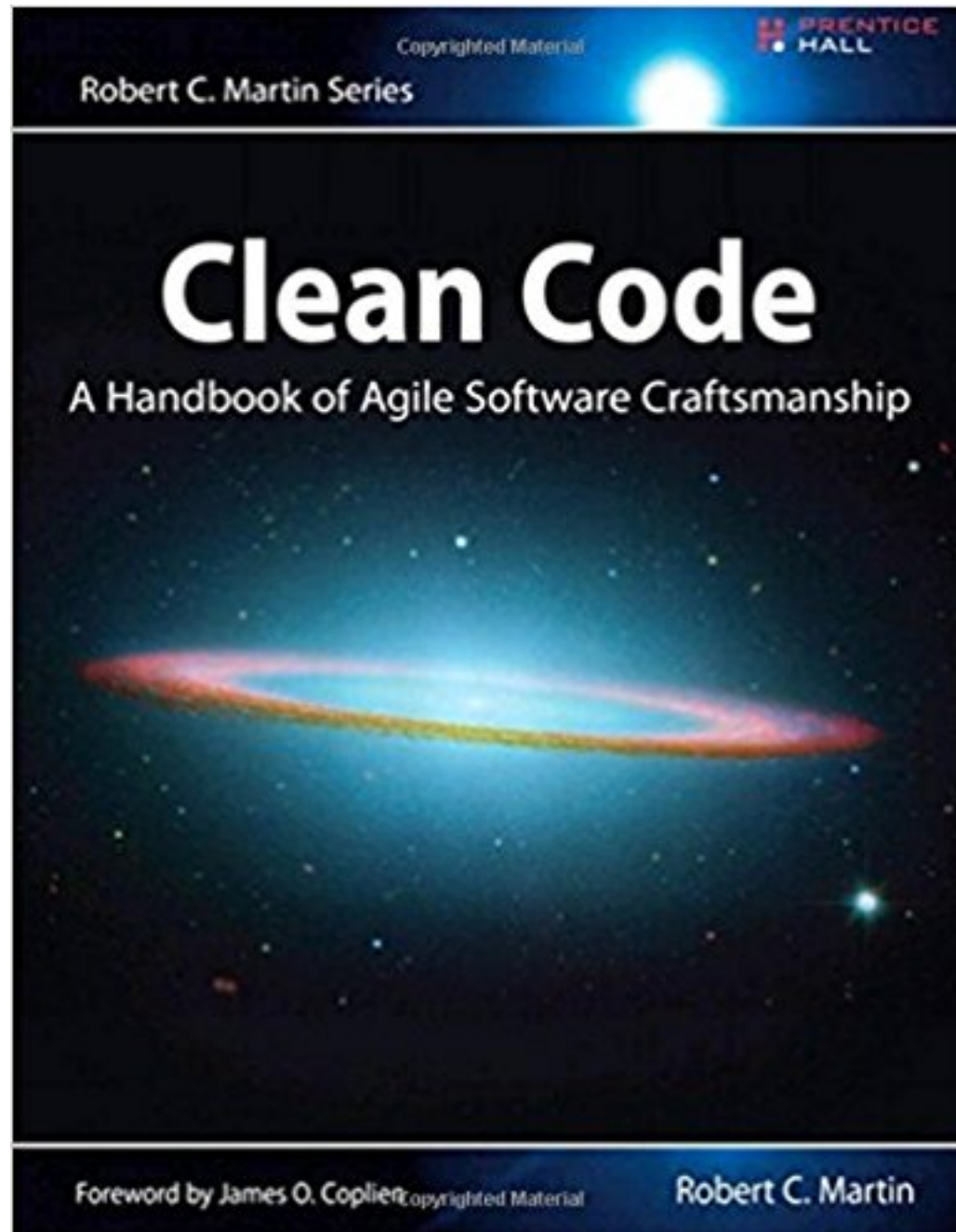
- ▶ AGILE Project Management
- ▶ Automation
- ▶ Be lazy: re-use, fork and extend
- ▶ Checklists

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READ ME.MD

GOING FURTHER

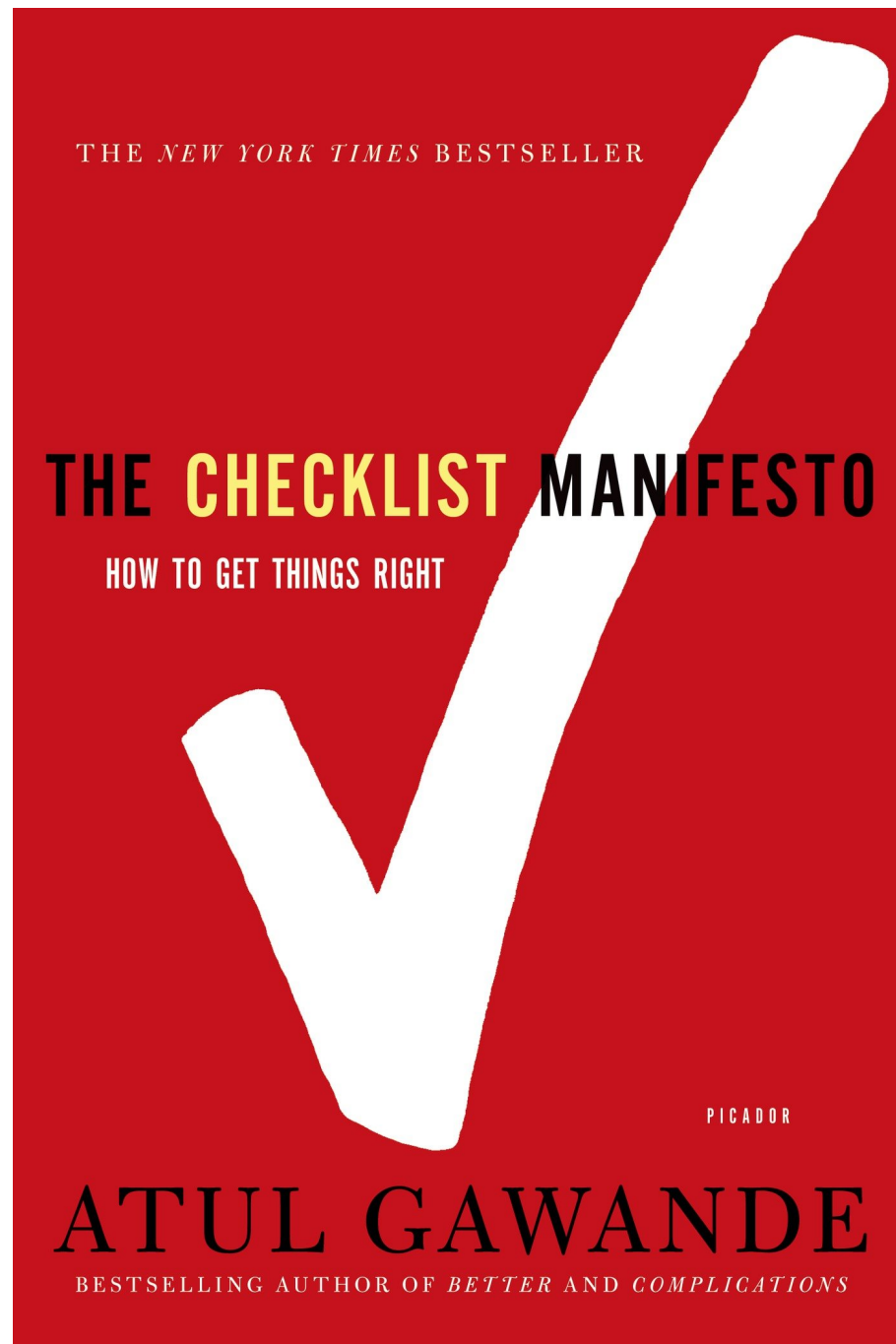
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Several People Are Coding

Applause from you and 131 others



Slack Engineering

Feb 22, 2016 · 4 min read

How About Code Reviews?



By Mark Christian and Duretti Hirpa



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gmolter@hsph.harvard.edu - @guillaumemolter

QUESTIONS?

Slides: <https://hsph.me/wpcampus18>



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