

14.–17.09.2009
in Nürnberg



Herbstcampus

Wissenstransfer
par excellence

Saubere Sache

Clean Code Developer – Wege zur besseren Software

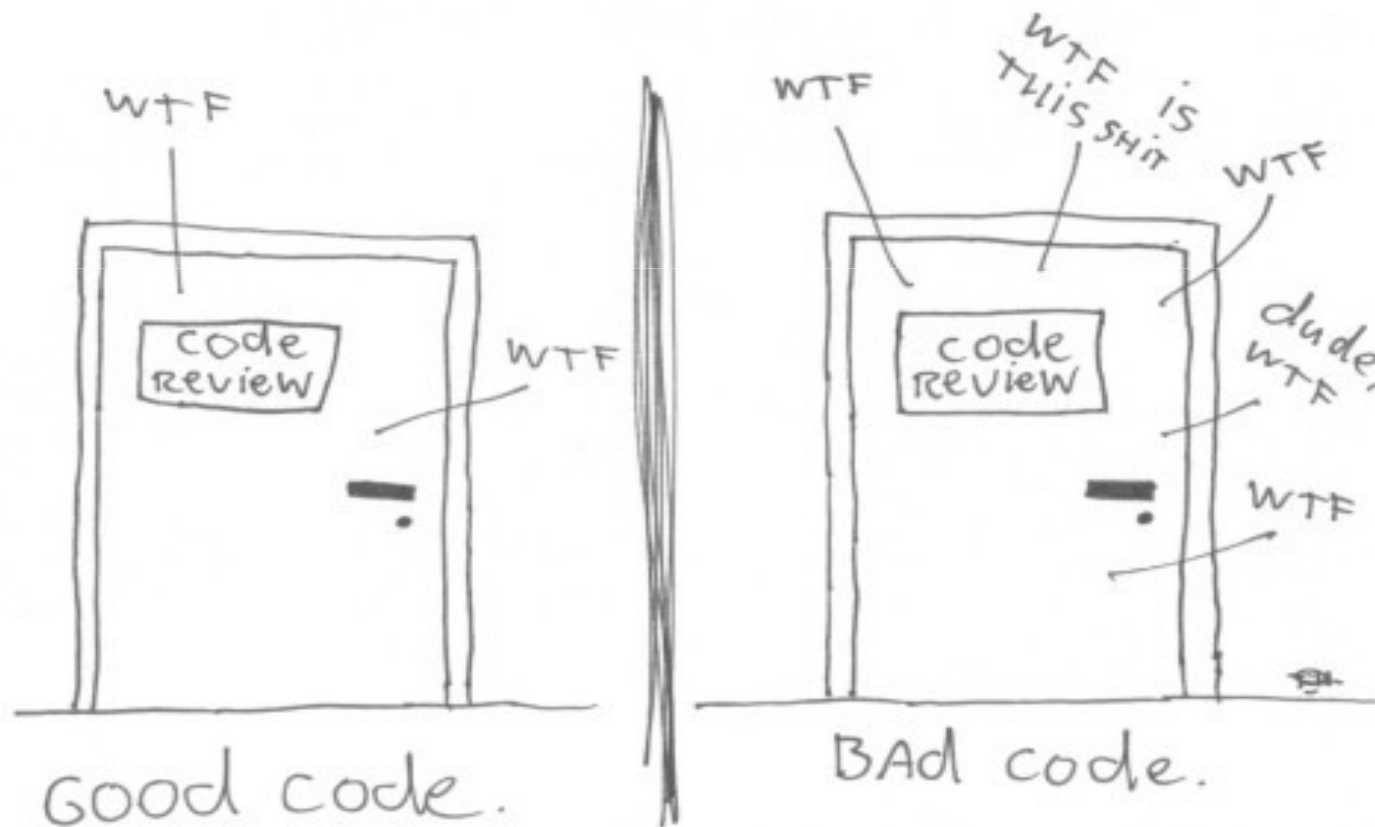
André Fleischer

Otto Group

Saubere Software?



The ONLY VALID MEASUREMENT
OF CODE QUALITY: WTFs/MINUTE



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Ruf der Branche?



Ausreichende Beherrschung

Professionalität – Geld?



Professionalität – Ausbildung?



Professionalität – Zertifikate

| | | |
|--|--|---|
| SCJA – Sun Certified Java Associate | CEH – Certified Ethical Hacker | MySQL Core Certification |
| SCJP – Sun Certified Java Programmer | CSM – Certified Scrum MasterFL – SAP Foundation | MySQL Professional Certification – Certified MySQL Professional |
| SCJD – Sun Certified Java Developer | Level (Grundlagen) | MySQL 5 Developer I Exam |
| SCWCD – Sun Certified Web Component Developer | MCP – Microsoft Certified Professional | MySQL 5 Developer II Exam |
| SCBCD – Sun Certified Business Component Developer | MCAD – Microsoft Certified Application Developer | MySQL 5 DBA I Exam |
| SCMAD – Sun Certified Mobile Application Developer | MCDBA – Microsoft Certified Database Administrator | MySQL 5 DBA II Exam |
| SCEA – Sun Certified Enterprise Architect | MCDST – Microsoft Certified Desktop Support Technician | MySQL Certified Associate |
| SCWSD – Sun Certified Web Services Developer | MCSA – Microsoft Certified Systems Administrator | MSS – Microsoft Sales Specialist |
| SCSP – SNIA Certified Storage Professional | MCSA – Microsoft Certified Systems Administrator | MCTS – Microsoft Certified Technology Specialist |
| SCSE – SNIA Certified Storage Engineer | MCSA – Microsoft Certified Systems Administrator | MCITP - Microsoft Certified IT Professional |
| SCSA – SNIA Certified Storage Architect | MCSA – Microsoft Certified Systems Administrator | MCPD – Microsoft Certified Professional Developer |
| SCSNE – SNIA Certified Storage Networking Expert | MCSA – Microsoft Certified Systems Administrator | MOS – Microsoft Office Specialist |
| SCCA HFT 3000 HiPath Field Technician 3000 | MCSA – Microsoft Certified Systems Administrator | MCAS – Microsoft Certified Application Specialist |
| SCCA Mobile Core Maintenance Engineer | MCSA – Microsoft Certified Systems Administrator | MCAP – Microsoft Certified Application Professional |
| SCCA Mobile Radio Maintenance Engineer | MCSA – Microsoft Certified Systems Administrator | MCM – Microsoft Certified Master |
| SCCS HFE 3000 HiPath Field Engineer 3000 | MCSA – Microsoft Certified Systems Administrator | MCA – Microsoft Certified Architect |
| SCCS HFE 4000 HiPath Field Engineer 4000 | MCSA – Microsoft Certified Systems Administrator | SCLP – SuSE Certified Linux Professional |
| SCCP HSE 3000 HiPath System Engineer 3000 | MCSA – Microsoft Certified Systems Administrator | SCLE – SuSE Certified Linux Expert |
| SCCP HSE 4000 HiPath System Engineer 4000 | MCSA – Microsoft Certified Systems Administrator | SCLT – SuSE Certified Trainer |
| SCCP HSE eCRM HiPath Application Engineer eCRM | MCSA – Microsoft Certified Systems Administrator | RHCE – Red Hat Certified Engineer |
| SNSE IT Network Security Engineer SBS Bochum | MCSA – Microsoft Certified Systems Administrator | RHCT – Red Hat Certified Technician |
| CIW Security Professional | MCSA – Microsoft Certified Systems Administrator | RHCA – Red Hat Certified Architect |
| CIW Security Analyst | MCSA – Microsoft Certified Systems Administrator | RHCSS – Red Hat Certified Security Specialist |
| SSCP – Systems Security Certified Practitioner | MCSA – Microsoft Certified Systems Administrator | RHCS – Red Hat Certified Salesperson |
| TISP – Teletrust Information Security Professional | MCSA – Microsoft Certified Systems Administrator | ITIL Foundation |
| GIAC – Global Information Assurance Certification | MCSA – Microsoft Certified Systems Administrator | ITIL Service Manager |
| RSA Certified Administrator | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Configuration Management |
| RSA Certified Systems Engineer | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Incident Management |
| RSA Certified Instructor | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Problem Management |
| TICSA – TruSecure ICISA Certified Security Associate | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Release Management |
| SCNS – Security Certified Network Specialist | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Change Management |
| SCNP – Security Certified Network Professional | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Service Level Management |
| SCNA – Security Certified Network Architect | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Financial Management |
| CISA – Certified Information Systems Auditor | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Capacity Management |
| CISM – Certified Information Security Manager | MCSA – Microsoft Certified Systems Administrator | ITIL Practitioner Availability Management |
| CSSA – Certified SonicWALL Security Administrator | MCSA – Microsoft Certified Systems Administrator | |

Professionalität – Ranklotzen?





Wo können wir lernen?

Werte und Sichtweisen



Qualität

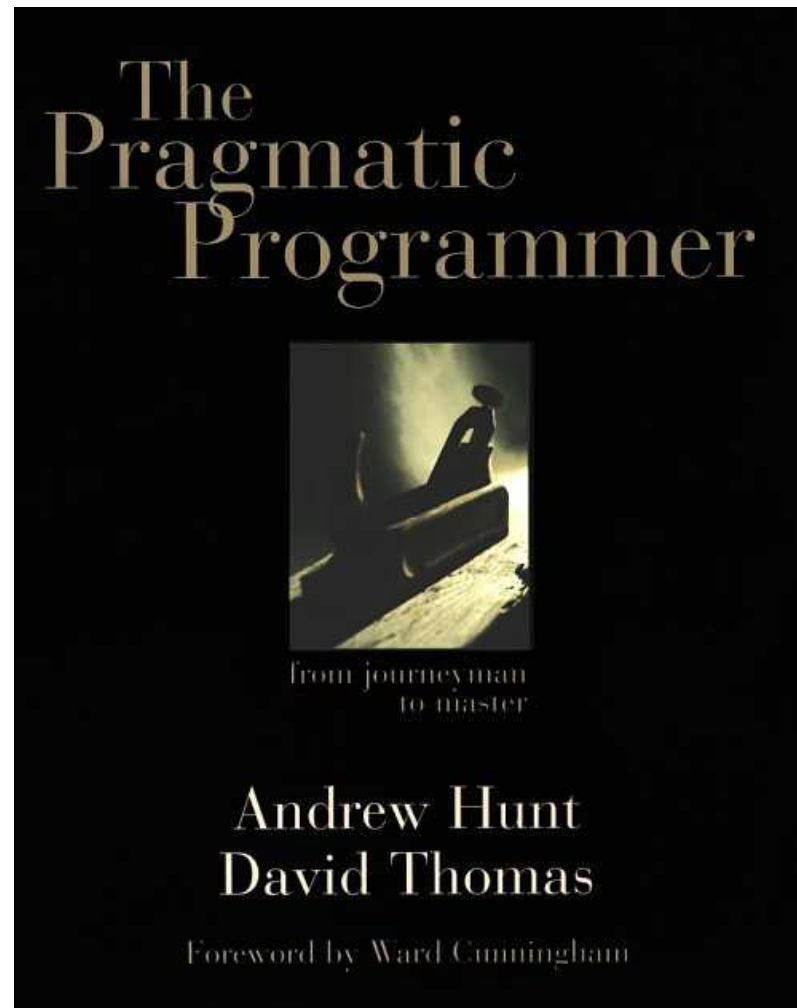
- Innere Software-Qualität:
 - Qualität aus Sicht des Software-Erstellers
 - Wartbarkeit
 - Erweiterbarkeit
 - Wiederverwendbarkeit
 - Verständlichkeit

 - Äußere Software-Qualität
 - Qualität aus Sicht des Anwenders
 - Fachliche Korrektheit
- ➔ Gute Innere Struktur und Qualität führt zu guter äußere Qualität

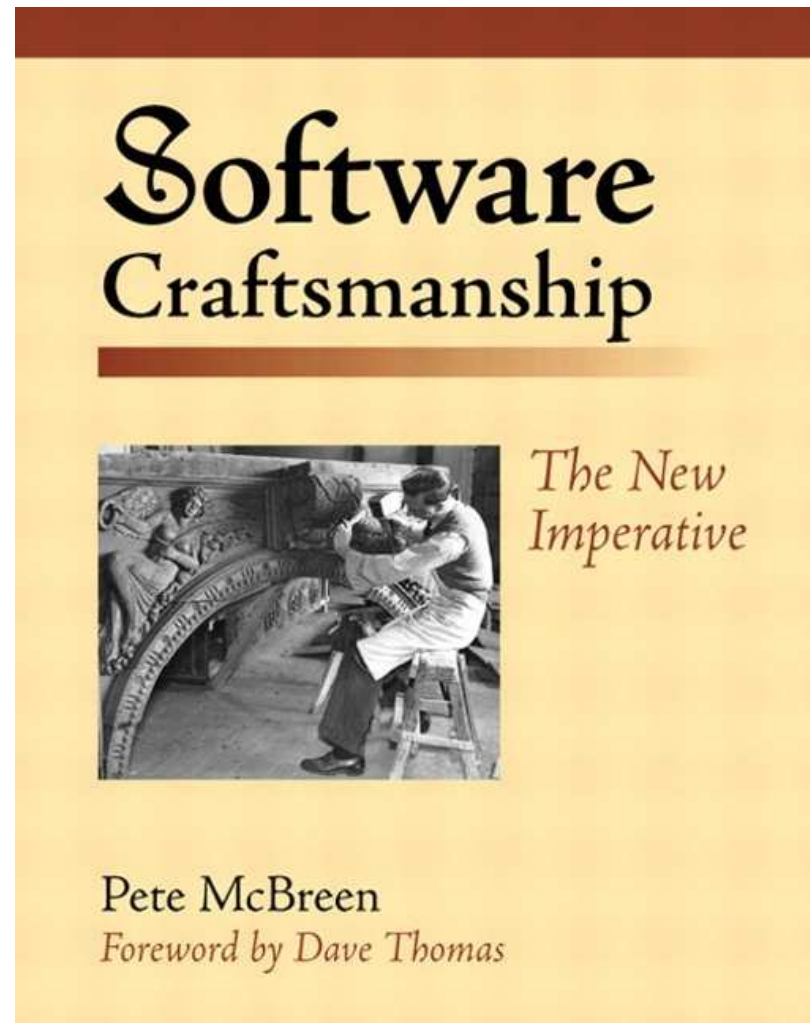
Weiß der Kunde wie
Software entwickelt wird?



Lösung?



Lösung?





Lösung? Agilität

Lösung?



clean-code-developer.de

Prinzipien, Regeln und Praktiken für bessere Software

Clean Code Developer

definiert ein

Wertesystem

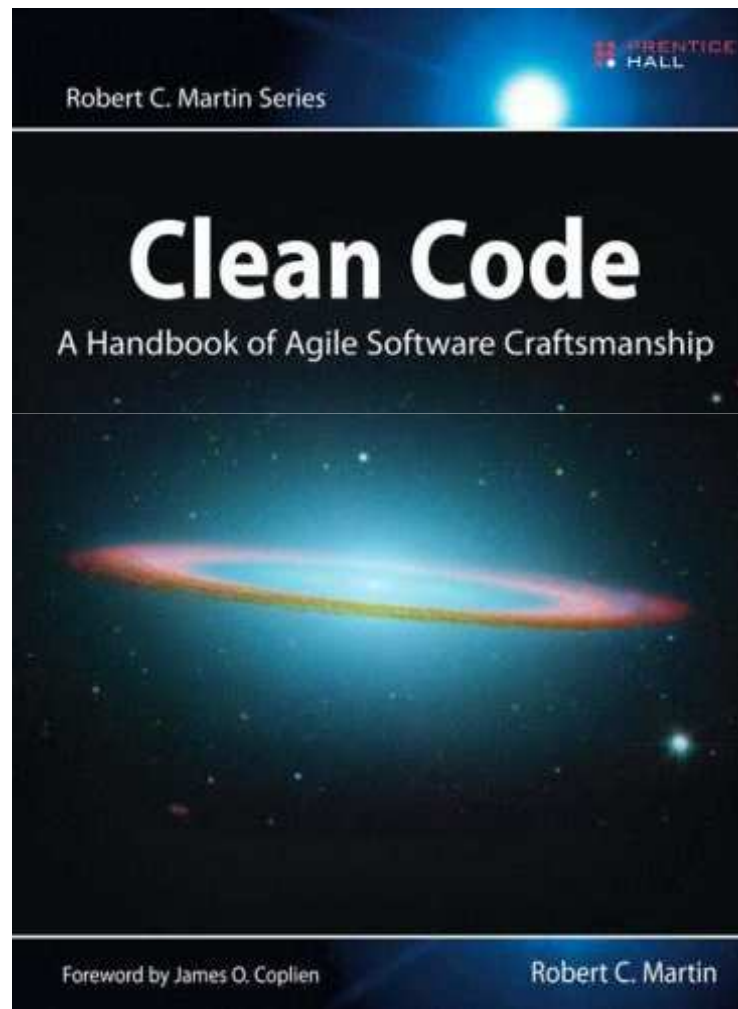
für mehr

innere Softwarequalität

durch mehr

Professionalität

Clean Code von Robert C. Martin





Ralf Westphal



Stefan Lieser

Die Werte

- Evolvierbarkeit
- Korrektheit
- Effizienz
- Reflexion

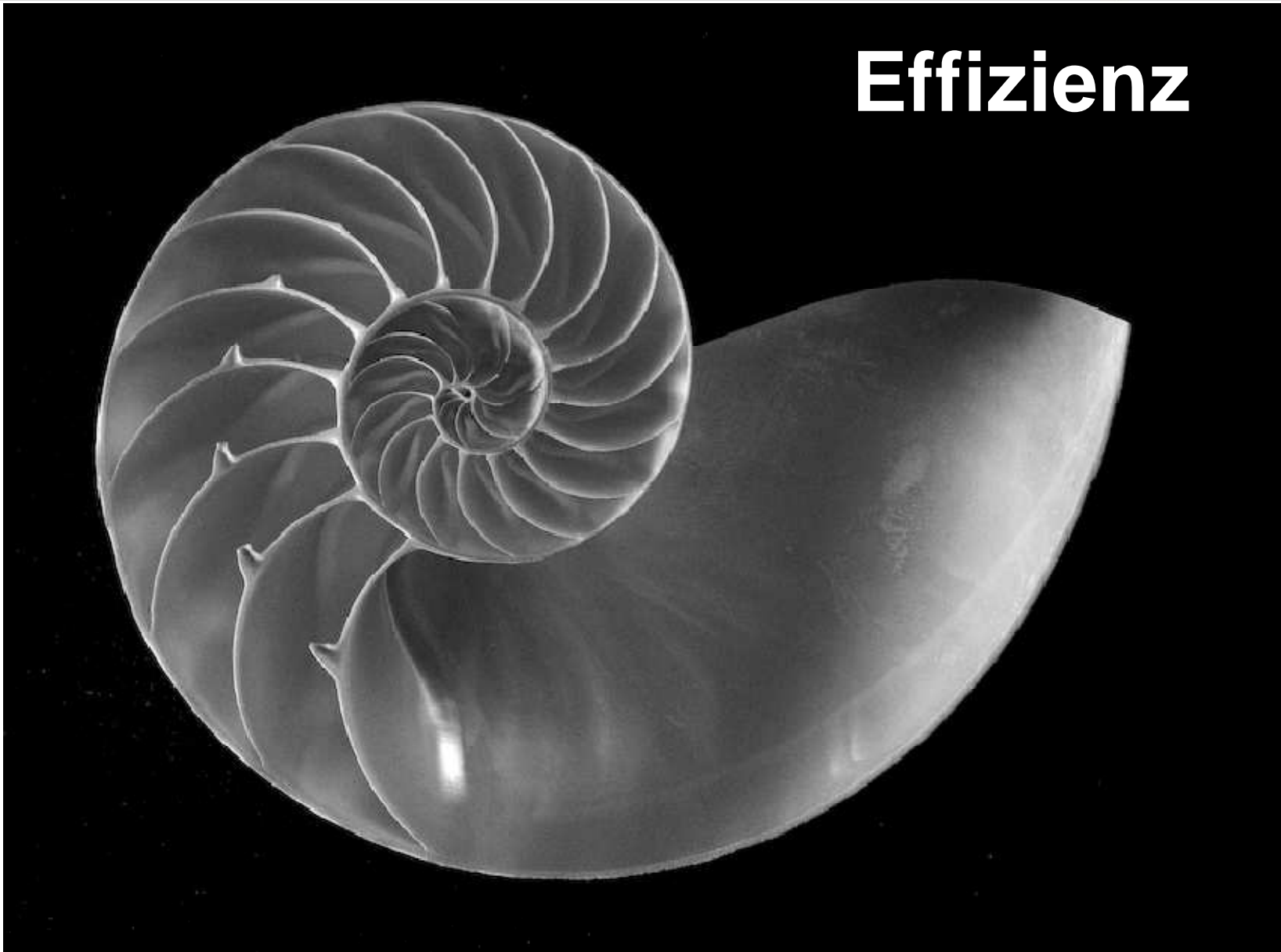


Evolvierbarkeit



Korrektheit

Effizienz



Reflexion



Die Bausteine

- Prinzipien
Gesetzmäßigkeiten
- Regeln
Entscheidungen
- Praktiken
Verhaltensweisen

Prinzipien

- DRY
- SoC
- KISS
- Law of Demeter
- YAGNI

Prinzipien

Single Responsibility Principle

Open Closed Principle

Liskov Substitution Principle

Interface Segregation Principle

Dependency Inversion Principle

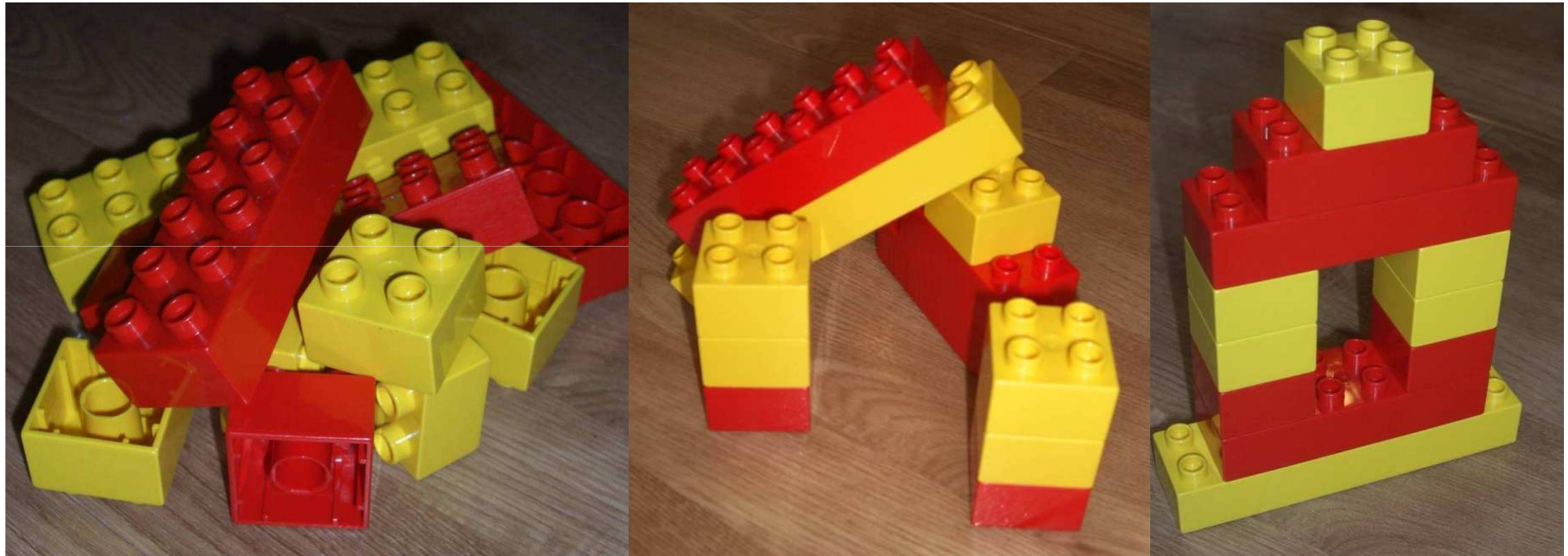
Regeln

- Pfadfinder
- Konventionen
- YAGNI
- Optimierung

Praktiken

- Iterativ
- Unit-Testing
- ContinuousIntegration
- Versionskontrolle
- IssueTracking
- Refaktoring
- RootCause
- Reflexion
- Erfahrung weitergeben
- Lesen

Komponenten



Grade



Tools





CCD@Practice

- Nennen sie es wie sie es wollen
- Selbst priorisieren
- Pragmatisch, nicht akademisch
- Die Welt ist bunt
- Von klein nach Groß

Ich – Wir – Alle



Morgen?

- Clean Code (und andere) lesen
- Webpage besuchen
- Ausprobieren
- Reflektieren
- Ausrollen

<http://clean-code-developer.de>

Über mich

André Fleischer, otto group

| | |
|--------------------|--|
| 1995 – 2000 | Studium Technische Informatik (HAW Hamburg) |
| 2001 – 2007 | Lufthansa System IT Consultant, Software Architekt |
| Seit 2007 | Otto Group, Software Architekt |
| Focus | Software-Architekturen, Java, JEE, Software-Entwicklungs-Prozesse, Objektorientierte Vorgehensweisen |
| Autor | ObjektSpektrum, JavaMagazin |
| Committer | XRadar |
| Speaker | JavaZone, prio.conference, access, EclipseCamp, Rational Software Conference, AKOT |
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Bildnachweis

- PC, Kapitän, Karte, Geld, Koch, Hammer: istockphoto.com
- Lego: <http://www.flickr.com/photos/seven13avenue/1684260249/in/set-72157602428684627>
- Werkzeuge: <http://flickr.com/photos/jeanmi/210374309/>
- Ralph, Stefan, Armbänder: clean-code-developer
- Chicgo, Kabelsalat , Portrait, Duplo: Eigenes
- Nautilus: <http://www.flickr.com/photos/donlonphoto/2721385316/sizes/o/>
- Triebwerk: Deutsche Lufthansa Mediabase: 0404_INTERNET_43-P.jpg
- CleanCode: Prentice Hall
- PragmaticProgrammer: Addison-Wesley Longman
- WTF: osnews.com/comic
- SoftwareCraftmans. Addison Wesley Pub Co Inc
- Delhi: <http://www.flickr.com/photos/baxiabhishek/2071306846/sizes/o/in/set-72157603316853778/>
- Sprinter: <http://www.dailyencouragement.net/archives/2008-09-16.htm>
- Studenten: <http://www.studenthelpforum.com/>
- Leparcours: <http://www.flickr.com/photos/josa/127013009/sizes/o/>

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Vielen Dank!

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