



Aspects and correlations of (embedded) software architecture in a mind map

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Bibliography – General

O. Vogel, I. Arnold, A. Chughtai, E. Ihler, U. Mehlig, Th. Neumann, M. Völter, U. Zdun, “Software-Architektur / Grundlagen – Konzepte – Praxis”, Spektrum Akademischer Verlag, 2005, ISBN 3-8274-1534-9

Mahbouba Gharbi, Arne Koschel, Andreas Rausch, Gernot Starke, “Basiswissen für Softwarearchitekten”, dpunkt.Verlag GmbH, 2018, ISBN 978-3-86490-499-8

Bibliography – Mind Map Links

4+1	https://www.cs.ubc.ca/~gregor/teaching/papers/4+1view-architecture.pdf (2019/01/14)
agile vs. traditional	https://agilemanifesto.org/ (2019/01/14)
aim42	https://www.aim42.org/using (2019/01/26)
arc42	https://arc42.org/ (2021/11/27)
architectural patterns	Frank Buschmann, Regine Meunier, Hans Rohnert, Peter Sommerlad, Michael Stal, “Pattern-Oriented Software Architecture / A System of Patterns”, John Wiley & Sons, Ltd, 1996, ISBN 978-0-471-95869-7
avoid complexity	John Ousterhout, “A Philosophy of Software Design”, Yaknyam, 2018, ISBN 978-1-7321022-0-0.
capabilities	http://man7.org/linux/man-pages/man7/capabilities.7.html (2019/01/14)
categories	Johannes Siedersleben, “Moderne Softwarearchitektur”, dpunkt.verlag GmbH, 2004, ISBN 3-89864-292-5
CFI	https://source.android.com/devices/tech/debug/cfi (2019/01/14)
cgroups	https://en.wikipedia.org/wiki/Cgroups (2019/01/14)
characteristics	http://www.informit.com/articles/article.aspx?p=1152528&seqNum=4 (2019/01/14)
component	https://www.techopedia.com/definition/3217/component (2019/01/07)
concentric architectures	https://blog.cleancoder.com/uncle-bob/2012/08/13/the-clean-architecture.html (2020/12/26)
container	https://jvns.ca/blog/2016/10/10/what-even-is-a-container/ (2019/01/15)
Conway's law	https://en.wikipedia.org/wiki/Conway%27s_law (2019/01/14)
CVEs	https://cve.mitre.org/ (2019/01/04)
debugging rules	David J. Agans, “Debugging”, AMACOM, 2002, ISBN 0-8144-7168-4
design	https://dictionary.cambridge.org/de/worterbuch/englisch/design (2019/01/07)
design patterns	Erich Gamma, John Vlissides, Ralph Johnson und Richard Helm, “Design Patterns / Elements of Reusable Object-Oriented Software”, Addison-Wesley, 1994, ISBN 0-201-63361-2
enterprise architect	Wolfgang Goebel, Milan Guenther, Annika Klyver und Bard Papegaaij, “Enterprise Design Patterns / 35 Ways to Radically Increase Your Impact on the Enterprise”, Intersection Group, 2020.
environment	https://www.merriam-webster.com/dictionary/environment (2019/01/07)
evolution	http://nectunt.bifi.es/to-learn-more-overview/mechanisms-of-evolutionary-change/ (2019/01/14)
FURPS	https://en.wikipedia.org/wiki/FURPS (2019/01/14)
GPL infected	https://yarchive.net/comp/linux/gpl_modules.html (2019/01/14)
human resources	https://github.com/dirkengel/articles/blob/main/FTEbasedPlanning.pdf (2018/10/11)
idioms	https://www.oreilly.com/library/view/pattern-oriented-software-architecture/9781118725269/OEBPS/9781118725269_c04.htm (2019/01/14)
Information Hiding	https://en.wikipedia.org/wiki/Information_hiding (2019/01/14)
IODA	https://leanpub.com/ioda-architektur-im-vergleich-dnp (2020/12/15)
ISO-25010	https://iso25000.com/index.php/en/iso-25000-standards/iso-25010 (2019/01/14)
ISO-26262	https://www.iso.org/standard/43464.html (2019/01/14)
organization	https://dictionary.cambridge.org/de/worterbuch/englisch/organization (2019/01/07)
obstructive	Stefan Toth, “Wie Architektur agile Zusammenarbeit fördert oder behindert”, OBJEKTSpektrum 01/2018
patterns	Christopher Alexander, Sara Ishikawa, Murray Silverstein, “A Pattern Language: Towns, Buildings, Construction”, Oxford University Press, 1977, ISBN 0-19-501919-9
people skills	https://www.oreilly.com/ideas/4-essential-skills-software-architects-need-to-have-but-often-dont (2019/01/04)
platform	Klaus Pohl et al., “Software Product Line Engineering”, Springer, 2005, ISBN 978-3540243724
principle	https://dictionary.cambridge.org/dictionary/english/principle (2019/01/07)
process definition	https://en.wikipedia.org/wiki/ISO/IEC_15504 (2019/01/14)
key principles	https://docs.microsoft.com/en-us/previous-versions/msp-n-p/ee658124(v=pandp.10)#KeyDesignPrinciples (2021/11/12)
leaky	https://www.joelonsoftware.com/2002/11/11/the-law-of-leaky-abstractions/ (2021/11/12)
logging vs. tracing	https://en.wikipedia.org/wiki/Tracing_(software)#Event_logging_versus_tracing (2019/01/08)
management triangle	https://github.com/dirkengel/articles/blob/main/QualityAndTheProjectManagementTriangle.pdf (2021/10/24)
metrics tracking	https://github.com/dirkengel/articles/blob/main/TheOzoneHoleMetric.pdf (2021/10/24) https://www.thoughtworks.com/insights/articles/fitness-function-driven-development (2021/10/24)
namespace	http://man7.org/linux/man-pages/man7/namespaces.7.html (2019/01/15)
microservices	Mark Richards, “Software Architecture Patterns”, O'Reilly Media, Inc., 2015, ISBN 9781491924242
refactoring (patterns)	Martin Fowler, “Refactoring”, Addison-Wesley, 1999, ISBN 0-201-48567-2
relationship	https://www.collinsdictionary.com/de/worterbuch/englisch/relationship (2019/01/07)
RFC2119	https://www.ietf.org/rfc/rfc2119.txt (2019/01/14)
SOLID	https://en.wikipedia.org/wiki/SOLID (2019/01/14)
SW architecture	http://www.iso-architecture.org/ieee-1471/defining-architecture.html (2019/01/14)
SWE.2	https://flecsim.de/images/download/AutomotiveSpice/Automotive%20Spice%203.0/SWE.2.html (2019/01/14)
SWE.5	https://flecsim.de/images/download/AutomotiveSpice/Automotive%20Spice%203.0/SWE.5.html (2019/01/14)
system	https://www.merriam-webster.com/dictionary/system (2019/01/07)
team	Thorsten Janning, “Scaling Agility: Wie führt man 100 agile Teams?” OBJEKTSpektrum, Ausgabe Agility/2014
test coverage	Peter Liggesmeyer, “Software-Qualität”, Spektrum Akad. Verlag 2002, ISBN 3-8274-1118-1
tragedy of the commons	https://en.wikipedia.org/wiki/Tragedy_of_the_commons (2020/12/26)
unknown unknowns	The Five Orders of Ignorance: http://www.corvusintl.com/CACM002-5OI.htm (2021/10/24)
XP	Kent Beck, “Extreme Programming Explained”, Addison-Wesley, 2000, ISBN 0-201-61641-6