97 Things Every Software Architect Should Know

Reference Guide - Version 1.0.0

- 1. Don't Put Your Resume Ahead of the Requirements
- 2. Simplify Essential Complexity; Diminish Accidental Complexity
- 3. Chances Are, Your Biggest Problem Isn't Technical
- 4. Communication Is King; Clarity and Leadership, Its Humble Servants
- 5. Application Architecture Determines Application Performance
- 6. Seek the Value in Requested Capabilities
- 7. Stand Up!
- 8. Everything Will Ultimately Fail
- 9. You're Negotiating More Often Than You Think
- 10. Quantify
- 11. One Line of Working Code Is Worth 500 of Specification
- 12. There Is No One-Size-Fits-All Solution
- 13. It's Never Too Early to Think About Performance
- 14. Architecting Is About Balancing
- 15. Commit-and-Run Is a Crime
- 16. There Can Be More Than One
- 17. Business Drives
- 18. Simplicity Before Generality, Use Before Reuse
- 19. Architects Must Be Hands On
- 20. Continuously Integrate
- 21. Avoid Scheduling Failures
- 22. Architectural Tradeoffs
- 23. Database As a Fortress

- 24. Use Uncertainty As a Driver
- 25. Warning: Problems in Mirror May Be Larger Than They Appear
- 26. Reuse Is About People and Education, Not Just Architecture
- 27. There Is No 'I' in Architecture
- 28. Get the 1,000-Foot View
- 29. Try Before Choosing
- 30. Understand the Business Domain
- 31. Programming Is an Act of Design
- 32. Give Developers Autonomy
- 33. Time Changes Everything
- 34. "Software Architect" Has Only Lowercase a's; Deal with It
- 35. Scope Is the Enemy of Success
- 36. Value Stewardship Over Showmanship
- 37. Software Architecture Has Ethical Consequences
- 38. Skyscrapers Aren't Scalable
- 39. Heterogeneity Wins
- 40. It's All About Performance
- 41. Engineer in the White Spaces
- 42. Talk the Talk
- 43. Context Is King
- 44. Dwarves, Elves, Wizards, and Kings
- 45. Learn from Architects of Buildings
- 46. Fight Repetition
- 47. Welcome to the Real World
- 48. Don't Control, but Observe
- 49. Janus the Architect
- 50. Architects' Focus Is on the Boundaries and Interfaces

- 51. Empower Developers
- 52. Record Your Rationale
- 53. Challenge Assumptions, Especially Your Own
- 54. Share Your Knowledge and Experiences
- 55. Pattern Pathology
- 56. Don't Stretch the Architecture Metaphors
- 57. Focus on Application Support and Maintenance
- 58. Prepare to Pick Two
- 59. Prefer Principles, Axioms and Analogies to Opinion and Taste
- 60. Start with a Walking Skeleton
- 61. It Is All About The Data
- 62. Make Sure the Simple Stuff Is Simple
- 63. Before Anything, an Architect Is a Developer
- 64. The ROI Variable
- 65. Your System Is Legacy; Design for It
- 66. If There Is Only One Solution, Get a Second Opinion
- 67. Understand the Impact of Change
- 68. You Have to Understand Hardware, Too
- 69. Shortcuts Now Are Paid Back with Interest Later
- 70. Perfect Is the Enemy of "Good Enough"
- 71. Avoid "Good Ideas"
- 72. Great Content Creates Great Systems
- 73. The Business Versus the Angry Architect

- 74. Stretch Key Dimensions to See What Breaks
- 75. If You Design It, You Should Be Able to Code It
- 76. A Rose by Any Other Name Will End Up As a Cabbage
- 77. Stable Problems Get High-Quality Solutions
- 78. It Takes Diligence
- 79. Take Responsibility for Your Decisions
- 80. Don't Be Clever
- 81. Choose Your Weapons Carefully, Relinquish Them Reluctantly
- 82. Your Customer Is Not Your Customer
- 83. It Will Never Look Like That
- 84. Choose Frameworks That Play Well with Others
- 85. Make a Strong Business Case
- 86. Control the Data, Not Just the Code
- 87. Pay Down Your Technical Debt
- 88. Don't Be a Problem Solver
- 89. Build Systems to Be Zuhanden
- 90. Find and Retain Passionate Problem Solvers
- 91. Software Doesn't Really Exist
- 92. Learn a New Language
- 93. You Can't Future-Proof Solutions
- 94. The User Acceptance Problem
- 95. The Importance of Consomm
- 96. For the End User, the Interface Is the System
- 97. Great Software Is Not Built, It Is Grown

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