Confidential

RIGHTING SOFTWARE

Book Club

Phase 1 - System Design



Righting Software Book Club - System Design

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Book Club

Introduction

Congratulations on taking a significant step toward transforming your career, your team and your company!

Righting Software introduces The IDesign Method of System Design and Project Design. In the book club, you and your colleagues will accelerate your acquisition of the skills required for excellence in software architecture.

Expectations

To maximize the effectiveness of the book club, participants should agree to

- Commit to **put in your best effort** to maximize the overall benefit for yourself and your colleagues.
- Give yourself ample time to complete the assigned preparation before each meeting. Be sure to complete all preparation before each meeting.
- Adopt a learning posture.
- Agree to be constructive and respectful, while embracing healthy criticism.
- Come **on-time**, ready to join in the discussion and to listen and learn from others.
- **Self-regulate** to ensure you are a fully present contributor while also inviting dialogue with others in the group. Eliminate all distractions during the book club meeting such as phones, email, slack, etc.

Book Club

Format

Plan to spend one full hour with the group, ending on time out of respect for everyone's busy schedules.

Terms

Certain terms used throughout the following meeting schedule have specific meanings as defined below.

Absorb: Read like a sponge with little to no evaluation

Skim: Skimming is a specific reading skill which is common in reading

newspapers, messages and emails. There is no need to read every word when skimming. The goal is to gain a general sense of vocabulary, concepts and diagrams that will be experienced

throughout the book.

Evaluate: Read with a critical eye. Underline and take notes. Summarize

relevant points. Prepare questions you may have. Identify areas of strong agreement, disagreement or confusion. As a final step, choose one topic from your reading that you want to ensure the

group discusses.

Review: Revisit material you have previously evaluated, including your

own related evaluation notes or insights you have gleaned from

others.

Book Club

Chapter 1 - The Method

Expected Outcome

You will understand what The Method is and, critically, what it is not.

Preparation

- Get the book! https://rightingsoftware.org
- <u>Absorb</u> This document from beginning to end, especially the Expected Outcome sections
- Absorb Chapter 1
- Skim Chapters 2-5
- Evaluate Chapter 1

Chapter 2 - Decomposition

Expected Outcome

You will understand the importance of correct system decomposition, and the pitfalls of incorrect decomposition. You will realize that practice is vital for architectural competence, professionalism and excellence.

Preparation

- Review Chapter 1
- Absorb Chapter 2
- Watch Juval Löwy on System Design -https://www.youtube.com/watch?v=8rXe3N6oWV0 (00:17:30)
- Evaluate Chapter 2

Book Club

Chapter 3 - Structure

Expected Outcomes

You will learn about the attributes and characteristics of well architected Structures. You will review critical "don'ts" of structural design, and understand the importance of symmetry for a good design.

Preparation

- Review Chapter 2
- Absorb Chapter 3
- Pick a tool and practice creating Static Architecture Diagrams (Pg. 67, 116)
 - You can recreate the examples from the book, or create your own based on another system.
 - Plan to share your results with the group.
 - Options: Visio, Draw.io, Miro, Google Drawings, etc.
- Evaluate Chapter 3

Chapter 4 - Composition

Expected Outcome

You will understand the importance of composable design. You will be introduced to techniques for designing systems that embrace changing requirements.

Preparation

- Review Chapters 1-3
- Absorb Chapter 4

Book Club

- Watch Composable Design The Missing Piece -https://www.youtube.com/watch?v=ukU344kEwP8 (01:39:31)
- Evaluate Chapter 4
- <u>Review</u> Appendix C, Pages 426-427 (The Prime Directive, Directives and System Design Guidelines)

Chapter 5 - System Design Example

Expected Outcomes

You will see System Design in action. The techniques of System Design will be presented in more detail. You will be prepared to begin the journey of regularly practicing System Design.

Preparation

- Review Chapters 1-4
- Absorb Chapter 5
- Evaluate Chapter 5

Appendix B - Service Contract Design

Expected Outcomes

You will learn techniques for achieving appropriate service modularity and granularity. You will learn how to define and factor service contracts.

Preparation

- Absorb Appendix B
- Evaluate Appendix B

Book Club

Watch Juval Löwy on The Path of the Architect https://channel9.msdn.com/Blogs/raw-tech/Juval-Lowy-On-Architect
 -Path (00:20:55)

Review - Retrospective

Expected Outcomes

You will summarize and solidify the lessons learned through the book club and your own reading, research and practice. You will share your personal plan for regular practice and growth in system design excellence.

Preparation

- Review Chapters 1-5
- Review Appendix B
- Review Appendix C, Pages 426-427 (The Prime Directive, Directives and System Design Guidelines)
- Define long and short terms goals you will achieve on your path as an architect.

What's Next?

Practice, practice and more practice. Learning how to properly design systems takes time, effort, continual learning and lots of practice.

Once you've designed the system, you need to design the project to build it.

The journey continues with:

Phase 2 - Project Design