

RIGHTING SOFTWARE

Book Club

Phase 1 - System Design



Righting Software Book Club - System Design

Copyright © 2020 IDesign, Inc.

This publication is protected by copyright. Redistribution and use without modification, are permitted provided that the following conditions are met:

1. Redistributions of this publication must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions of this publication may not be sold or re-sold.
3. Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products or services without specific prior written permission.

THE AUTHOR AND COPYRIGHT HOLDER HAVE TAKEN CARE IN THE PREPARATION OF THIS PUBLICATION, BUT MAKE NO EXPRESSED OR IMPLIED WARRANTY OF ANY KIND AND ASSUME NO RESPONSIBILITY FOR ERRORS OR OMISSIONS. NO LIABILITY IS ASSUMED FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE USE OF THE INFORMATION CONTAINED HEREIN.

Righting Software, by Juval Löwy

Published Dec 10, 2019 by Addison-Wesley Professional

ISBN-10: 0-13-652403-6

ISBN-13: 978-0-13-652403-8

Copyright © 2020 Pearson Education, Inc.

Find out more about Righting Software at <https://rightingsoftware.org>

The IDesign name and logo are Trademarks of IDesign, Inc. <https://idesign.net>

Prepared by Jeff Doolittle

jeff.doolittle@idesign.net

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 conflict**.
- 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.

RIGHTING SOFTWARE

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.

Week 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>
- [Absorb](#) This document from beginning to end, especially the Expected Outcome sections
- [Absorb](#) Chapter 1
- [Absorb](#) Appendix C, Pages 426-427 (The Prime Directive, Directives and System Design Guidelines)
- [Skim](#) Chapters 2-5
- [Evaluate](#) Chapter 1

Week 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)

RIGHTING SOFTWARE

Book Club

- [Review](#) Appendix C, Pages 426-427 (The Prime Directive, Directives and System Design Guidelines)
- [Evaluate](#) Chapter 2

Week 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

Week 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
- Watch *Composable Design – The Missing Piece* - <https://www.youtube.com/watch?v=ukU344kEwP8> (01:39:31)
- [Evaluate](#) Chapter 4

Week 5 - System Design

System Overview, Use Cases and Requirements, Anti-Design

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
- [Review](#) Appendix C, Pages 426-427 (The Prime Directive, Directives and System Design Guidelines)
- [Evaluate](#) Chapter 5

Week 6 - System Design Part 2

Business Alignment and The Architecture

Preparation

- [Review](#) Chapters 1-4
- [Review](#) Chapter 5
- [Review](#) Appendix C, Pages 426-427 (The Prime Directive, Directives and System Design Guidelines)

Week 7 - System Design Part 3

Design Validation

Preparation

- [Review](#) Chapters 1-4
- [Review](#) Chapter 5
- [Review](#) Appendix C, Pages 426-427 (The Prime Directive, Directives and System Design Guidelines)

Week 8 - 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

- [Review](#) Chapters 1-5
- [Absorb](#) Appendix B

RIGHTING SOFTWARE

Book Club

- [Evaluate](#) Appendix B
- Watch *Juval Löwy on The Path of the Architect* - <https://channel9.msdn.com/Blogs/raw-tech/Juval-Lowy-On-Architect-Path> (00:20:55)

Week 9 - Retrospective and What's Next?

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.