

Extracted from:

The Nature of Software Development

Keep It Simple,
Make It Valuable,
Build It Piece by Piece

This PDF file contains pages extracted from *The Nature of Software Development*, published by the Pragmatic Bookshelf. For more information or to purchase a paperback or PDF copy, please visit <http://www.pragprog.com>.

Note: This extract contains some colored text (particularly in code listing). This is available only in online versions of the books. The printed versions are black and white. Pagination might vary between the online and printed versions; the content is otherwise identical.

Copyright © 2015 The Pragmatic Programmers, LLC.

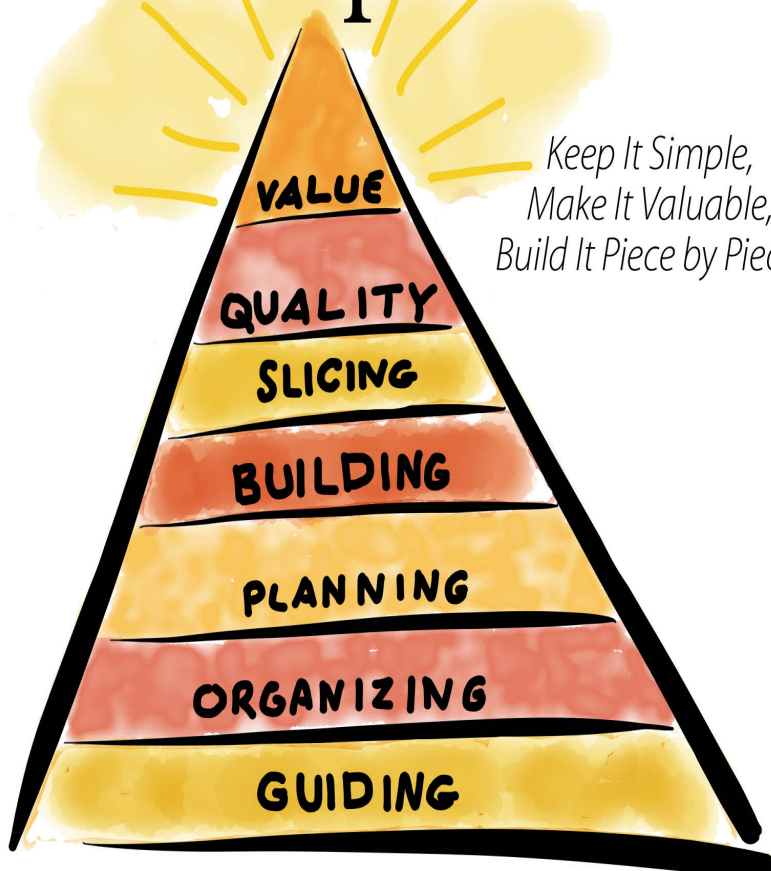
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior consent of the publisher.

The Pragmatic Bookshelf

Dallas, Texas • Raleigh, North Carolina

The Nature of Software Development



Ron Jeffries

edited by Michael Swaine

The Nature of Software Development

Keep It Simple,
Make It Valuable,
Build It Piece by Piece

Ron Jeffries

The Pragmatic Bookshelf

Dallas, Texas • Raleigh, North Carolina



Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and The Pragmatic Programmers, LLC was aware of a trademark claim, the designations have been printed in initial capital letters or in all capitals. The Pragmatic Starter Kit, The Pragmatic Programmer, Pragmatic Programming, Pragmatic Bookshelf, PragProg and the linking *g* device are trademarks of The Pragmatic Programmers, LLC.

Every precaution was taken in the preparation of this book. However, the publisher assumes no responsibility for errors or omissions, or for damages that may result from the use of information (including program listings) contained herein.

Our Pragmatic courses, workshops, and other products can help you and your team create better software and have more fun. For more information, as well as the latest Pragmatic titles, please visit us at <https://pragprog.com>.

The team that produced this book includes:

Michael Swaine (editor)
Potomac Indexing (indexer)
Liz Welch (copyeditor)
Dave Thomas (typesetter)
Janet Furlow (producer)
Ellie Callahan (support)

For international rights, please contact rights@pragprog.com.

Copyright © 2015 The Pragmatic Programmers, LLC.
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior consent of the publisher.

Printed in the United States of America.
ISBN-13: 978-1-941222-37-9
Encoded using the finest acid-free high-entropy binary digits.
Book version: P1.0—February, 2015

Acknowledgments

...where to begin...where to end...

My parents, for freedom, trust, and a great library...

Sister Mary Marjorie, for a first taste of science; Mr. Dansky, for a first taste of love for a subject; the Jesuits, for showing the value of thinking and of course for my fashion sense.

Rick Camp, for inviting the kid up the street to be an intern at Strategic Air Command; Bill Rogers, for tossing me into programming and then helping me learn to swim.

Colleagues over the years: Charles Bair, Karen Dueweke, Steve Weiss, Gene Somdahl, Rick Evarts, Mike McConnell, Jean Musinski, Jeanne Hernandez, Dorothy Lieffers, Don Devine...it would take pages to mention everyone who has touched me.

Partners, mentors, colleagues in Agile: Ward Cunningham, Kent Beck, Chet Hendrickson, Ann Anderson, Bob Martin, Alistair Cockburn, Martin Fowler, Michael Feathers, Bob Koss, Brian Button, Brian Marick, Ken Schwaber, Jeff Sutherland, Ken Auer...I can't begin to list all those to whom I'm grateful.

The Internet and Twittersphere, who are surely tired of seeing me try to explain these thoughts so often.



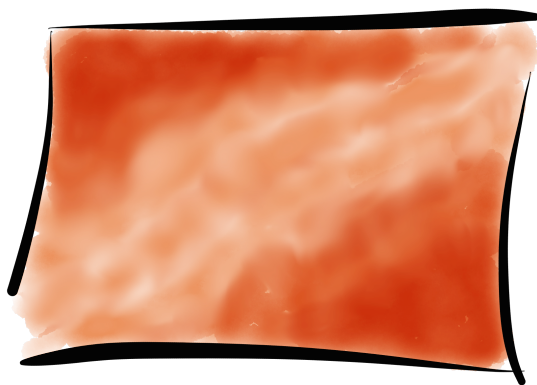
Helpers with this book: Bill Tozier, Laura Fisher, and of course Chet Hendrickson, who has listened to and shaped every word. Any remaining errors are of course his fault.

The wonderful folks at The Pragmatic Programmers: Andy Hunt and Dave Thomas; Susannah Pfalzer, who knew when to manage me and when to stand back; Janet Furlow, who pushed the book through production; my patient and long-suffering editor, Mike Swaine—without these people there'd be no book.

My “boys,” Ron and Mike, of whom I am most proud and who have filled my life with joy and events of interest.

And more than all of these, Ricia, my wife: without her nothing would seem worth doing. Thank you for taking care of me.

Thanks!



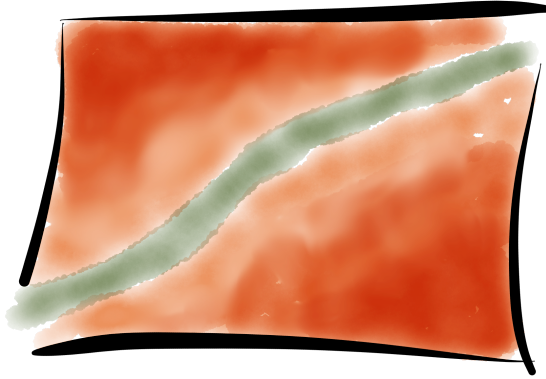
Software is Lava

Introduction

Kids often play a game: *The floor is lava*. In this game, you have to get from one place to another without touching the floor. Because the floor is lava. If you step in lava, you die, horribly, screaming. Don't step in lava. So, in the game, you must jump from the couch to the chair, crawl across the table, and leap to safety in the kitchen, where the floor is not lava.

Software is lava. Often it seems that there's no safe place to step. Worse yet, we're not allowed to jump on the furniture. Mom said. Sorry.

So what are we to do? As we build software, it seems that we're stepping in lava every day. It's complicated, it gets more complicated, and often it seems that we're just doomed.



There has to be a better way.

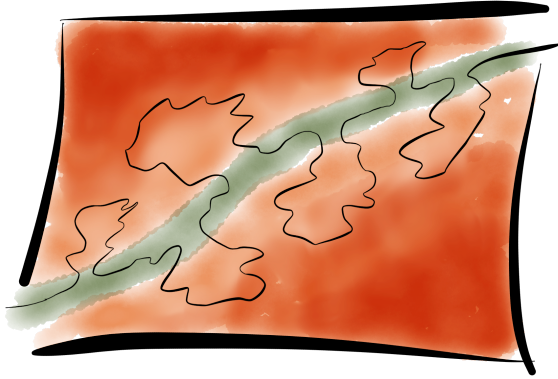
We all feel it. We're all sure that there must be a way to build software that isn't lava. We didn't get there last time, but next time...*next time*...we'll get it right.

And, sure enough, next time, more lava. Ow! Die screaming.

Yet most of us have had moments when our feet weren't burning. There seem to be cool, grassy patches amid the lava. Sometimes we find them. It feels so good to be there.

The premise of this book is that there aren't just patches of grass—there is a cool, green, grassy path. Maybe we can't be on that path every moment, but understanding the path better is the way to a happier project.

I call that path “the Natural Way,” because I believe that the path is built into a simple notion, a focus on delivering value early and often.

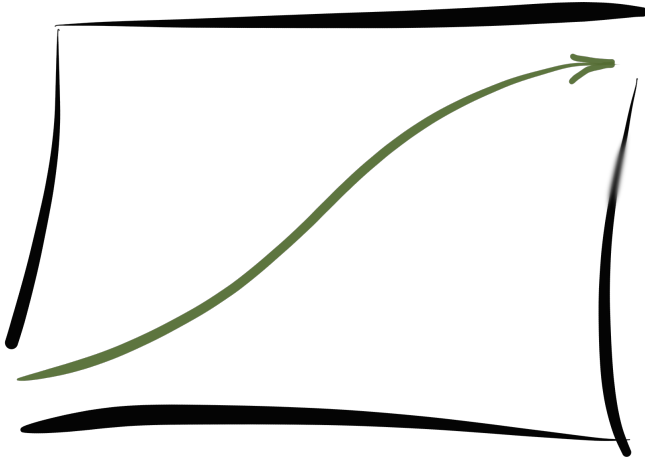


We will wander off the path.

Even though we much prefer to be on the grass than in the lava, it seems that we always get in the lava. (Sometimes lava is spelled differently. Anyway, we're in it.)

If there is a path—and I hope to show you that there is—we will wander off of it. Yes, we will. So as I describe the path to you, don't imagine that I believe we'll all be on the path and live happily ever after with no problems, with our grateful feet caressing the happy grasses of the path. We couldn't be that good, or that lucky.

What we can do is remain aware that there is a path. When we're not on the path, we'll think about value. We'll think about the Natural Way. And quite likely we'll be able to find our way back, if not to the grass, at least to a place where the lava isn't quite so hot.



The Natural Way

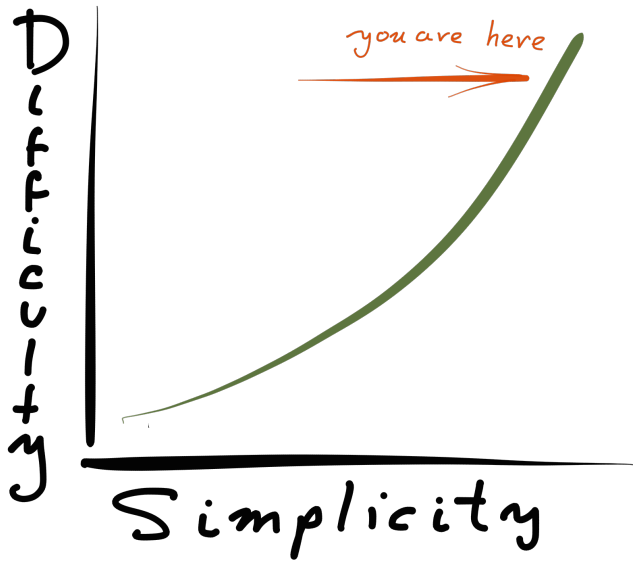
The story in this book is a simple one: there is a *Natural Way* to build software, and it serves everyone well.

The Natural Way serves end users well because it delivers value to them sooner.

The Natural Way serves the business well because it provides a return on investment sooner, because it provides important information quickly, and because it provides the ability to adjust direction as needed.

The Natural Way serves management well too. It lets management see what's really going on inside the project so that when action is needed, there will be time to act. And it reduces management's problems by making information visible so that we don't have to dig for it.

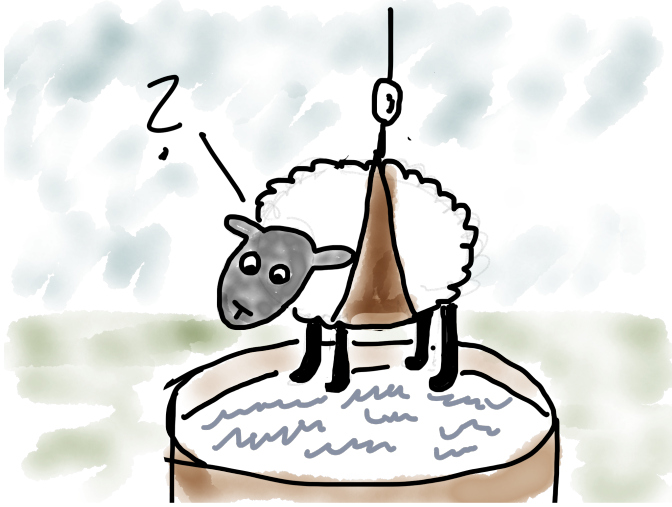
The Natural Way even makes the job easier for developers. It provides them with clear direction and allows them freedom to use their skills to build what the organization needs, when it's needed.



What is described here is simple—but it's not easy. You'll need to think about these ideas, to figure out how they'll be valuable to you, and to learn to do the things we explore here. Keep moving toward simplicity. You'll be glad you did.

The Natural Way does require us to think, to learn, and to change a bit. I think you'll see here that moving toward the Natural Way need not be traumatic. It can actually be quite a bit of fun.

Come along with me, and explore how we can make software development simpler by focusing on frequent delivery of visible value. We'll not talk about how things are, but how they might be, if we try.



A final warning before you jump in:

Channeling comedian Eddie Izzard's NSFW "Death Star Canteen" bit:

This is not a book of what the heck to do!

It's not a book of recipes. It's not about one way to do something. That's not our purpose here. We're here to think about how things work, to ready ourselves for whatever may happen. There are many ways to accomplish what you need. I trust you to find ways, think of ways, and select among them.