

Extracted from:

## Forge Your Future with Open Source

Build Your Skills. Build Your Network.  
Build the Future of Technology.

This PDF file contains pages extracted from *Forge Your Future with Open Source*, 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 © 2018 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

Raleigh, North Carolina

The  
Pragmatic  
Programmers

# Forge Your Future with Open Source

Build Your Skills  
Build Your Network  
Build the Future  
of Technology

VM (Vicky) Brasseur  
*edited by Brian MacDonald*

# Forge Your Future with Open Source

Build Your Skills. Build Your Network.  
Build the Future of Technology.

VM (Vicky) Brasseur

The Pragmatic Bookshelf

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 books, screencasts, and audio books can help you and your team create better software and have more fun. Visit us at <https://pragprog.com>.

The team that produced this book includes:

Publisher: Andy Hunt

VP of Operations: Janet Furlow

Managing Editor: Brian MacDonald

Copy Editor: Paula Robertson

Indexing: Potomac Indexing, LLC

Layout: Gilson Graphics

For sales, volume licensing, and support, please contact [support@pragprog.com](mailto:support@pragprog.com).

For international rights, please contact [rights@pragprog.com](mailto:rights@pragprog.com).

Copyright © 2018 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.

ISBN-13: 978-1-68050-301-2

Book version: P1.0—October 2018

# Preface

---

Here we are—forty years on from the launch of the Free Software movement and twenty years since the “open source” and its related movement were created—and it’s still really hard to contribute to most free and open source software projects. There are all of these unspoken rules, unfamiliar language, and a lack of documentation that would be impressive were it not so unfortunate. The web is full of articles about how to contribute, but none of them cover everything you need to make your first contribution. You end up playing contribution Whac-a-Mole,<sup>1</sup> with a new problem or unspoken rule popping up the moment you think you know what’s going on. It’s all so frustrating sometimes.

Don’t Panic, I’m here to help. Welcome, my friends, to the book that finally makes sense of contributing to open source.

## What’s in This Book?

In these pages, you’ll find everything you need to start contributing to free and open source projects. First, we’ll cover the history and philosophies of these movements, since without that knowledge, you’ll trip and fall on the very first step of your journey to becoming a contributor. After that, we’ll investigate the benefits of contributing to free and open source and help you select a project that suits your needs, so both you and the project can benefit from your contribution. Obviously we’ll cover how to make the contribution itself, but we’ll also discuss the many ways you can contribute without writing a line of code. All of those unspoken rules will be revealed, and we’ll even talk about how to start your own open source project.

## What’s NOT in This Book?

This book will not hand you a list of free and open source projects where you should start contributing. Not only would such a list be out of date the moment

---

1. [https://en.wikipedia.org/wiki/Whac-A-Mole#Colloquial\\_usage](https://en.wikipedia.org/wiki/Whac-A-Mole#Colloquial_usage)

it was published, but it also wouldn't be the right list for everyone. Thousands of free and open source software (FOSS) projects exist in the world today. It would be silly to list a few, then send all of you stampeding off to contribute to just those. With so many projects to choose from, you can find a project that matches your specific skills and interests. In fact, there's an entire chapter to help you do just that.

This book also does not recommend which tools to use for contributing. The most effective tool is the one that works for you (as long as the end product meets the requirements of the project).

I've gone to great lengths to try not to influence your choice of project or tools, while giving you the information and support you need to make your own decisions. You do you, honey.

## Who Should Read This Book?

From experienced software professional to new student, anyone who wishes to contribute to FOSS will find value in this book. While most people think FOSS contributions are only the realm of programmers, nothing could be further from the truth. Software development is a multidisciplinary undertaking. Writers, testers, designers, project managers, marketers... There's a place for everyone in free and open source software.

While this book contains some technical concepts, it does not assume that you are a programmer, that your contribution will be code, or even that you're overly familiar with software development. Free and open source software needs all sorts of contributions, submitted by all sorts of people.

## Why Is This Book Not Openly Licensed?

Yeah, I thought someone might ask that.

With the growing awareness and importance of open source along with the explosion of new projects released every year, it's more important than ever that there be a resource to enable and support the immense number of new contributors we're going to need to help maintain that software. This book is that resource.

While this book needed to exist, and I was well equipped and well placed to write it, it wasn't going to happen if I did it on my own. Without external help or motivation, I know that I would never finish a project this huge. I mean: writing a book? That's really intimidating.

To make this happen, I needed help. Enter Pragmatic Bookshelf. Their experience and support could guide and motivate me to create this book, but only if they administer the copyright of it. This allows them to do things like negotiate translations and similar administrative duties, with which I have no experience whatsoever.

The choices were:

1. I assign copyright of the book to Pragmatic, then have their invaluable support to help bring it into the world, and Pragmatic chooses a book license based on their current business practices.
2. I retain copyright, but I do it alone and unsupported, so the book is never started, finished, nor released under any license at all.

This book is an important resource that is long overdue and will help thousands of people and free and open source software projects. That it finally exists is more important to me than my copyright. So I chose Option 1. I have no regrets. Pragmatic are great people.

## Suggestions, Errata, or Questions?

Free and open source software is all about the community coming together to collaborate and build something amazing. This book is no different. Do you have suggestions for how to improve the book for future generations of contributors? Problems with the content? Share your thoughts using the errata submission form on the book's catalog page on the Pragmatic Bookshelf website.<sup>2</sup>

Also, if you have any questions at all about contributing to free and open source software, join us on the #fossforge channel on the Freenode Internet Relay Chat (IRC) network. A web interface<sup>3</sup> is available to make joining easy, as well as a quickstart guide<sup>4</sup> if you're not familiar with IRC. The channel community will gladly help support you in your journey from novice to contributor.

## Credits

I mostly wrote this book on a 2016 MacBook Pro, in Markdown, using MacVim as my text editor and git as my version control, though more than a few pages were written on a 9.7" iPad Pro using the Textastic text editor and

---

2. <https://pragprog.com/titles/vbopens/errata>  
 3. <https://webchat.freenode.net/?channels=%23fossforge>  
 4. <https://opensource.com/life/16/6/irc-quickstart-guide>

WorkingCopy git client. The diagrams are my creation, using OmniGraffle. The font in the diagrams is *Open Sans*, created by Steve Matteson and licensed under the Apache 2.0 open source license. The handwriting font used in several examples is *Nothing You Could Do*, created by Kimberly Geswein and licensed under the Open Font License. The Kannadan font used in *When It Goes Wrong* is *Kedage* by the Indian Language Technology Solutions Project and is licensed under the GNU General Public License version 2.

## Acknowledgments

Books don't happen easily, and they don't happen solely through the force of will of their authors. True to the spirit of free and open source software, a lot of people contributed to the creation of this work.

To every free and open source community member and leader who was patient and generous with their guidance and advice over the years and who helped me learn what was necessary for this book: Thank you.

To the Opensource.com community moderators, whose brilliance and insight never fail to inspire me to be a better human and contributor: Thank you.

To the technical reviewers, and particularly to those who gave up part of their 2017 holiday to review the first half of the book: Thank you. The reviewers were (in alphabetical order by first name): Alessandro Bahgat, Andrea Goulet, Ashish Bhatia, Ben Cotton, Daivid Morgan, Derek Graham, Donna Benjamin, Emanuele Origgi, Fabrizio Cucci, Glen Messenger, John Strobel, Johnny Hopkins, Karen Sandler, Karl Fogel, Katie McLaughlin, Máirín Duffy, Maricris Nonato, Mark Goody, Matthew Oldham, Michael Hunter, Mitchell Volk, Nick McGinness, Nouran Mhmoud, Peter Hampton, Raymond Machira, Rikki Endsley, Robin Muilwijk, Scott Ford, Stephen Jacobs, Tibor Simic, and Zulfikar Dharmawan. If any errors or omissions still exist in the book, the fault is entirely mine for ignoring their advice.

To Chethan R Nayak, for providing the Kannadan translation used in *When It Goes Wrong*: Thank you.

To Sage Sharp, for wisely suggesting I add a section to *Prepare to Contribute* about roles commonly found in FOSS projects: Thank you.

To Ben, John, Katie, and Rikki, for their invaluable counsel during the title selection process: Thank you.

To the Pragmatic team, for believing this book was a good idea and providing a happy and supportive home for it: Thank you.

To Brian, my editor and my friend, who came to me with a crazy idea and who helped me turn it into reality, without whom I *literally* could not have done this (pun intended): Thank you.

To everyone on the channel, who knows who they are and who are there for me through it all: Thank you. I love each and every one of you and I will never tire of saying so.

And finally to you, who will help shape the future of technology through your free and open source contributions: Thank you.