### Dear Reader,

nice to have you here! Why did this book come about? When I started working with GitHub, I was initially overwhelmed by the platform. I wondered where andhow I should get in and what was important at all. I then tried to sift through the countless sources that promised an easy introduction — in order to get this very introduction. I found brilliant tutorials and grottobad videos and spent a lot of time filtering the info and sorting it by usefulness.

I would have liked a compact introduction that summarizes and explains everything relevant for a beginner in one place - without a new, unknown technical term in incomprehensible technical jargon. I would have preferred a book that takes me by the hand and shows me step by step what is important, where I can find what and how it all works. But that didn't exist in this form. So I tried to write an introduction that was as practical and hopefully understandable as possible, and you have it right in front of your nose.1

## Is this book right for me?

You are in the right place if you can find yourself in one or the other of the following descriptions:

 You like to program apps in your spare time and look for a way to publish them. You might even want to work collaboratively on an app with your friends. I'm happy about feedback: githubbuch@ist-einmalig.de - yes I know, it sounds a bit arrogant, the alternatives would have been @alphafrau.de oder@streber24.de ".

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- You have always been fascinated by open source and have always wondered how and where such projects can actually be supported. In addition, you wonder whether you have to be able to program for this.2
- You have been using an app for a long time and want to inform the developers about a bug that annoys you. When you clicked report a bug, you landed on a GitHub page and didn't get any further at first. This worms you, and you want to change it.
- You've tried to deal with GitHub before, but it was all too complicated for you. You would like to start a new attempt now and hope to finally really understand how it all works and why pull-re quests are not called push requests.3
- You just want to know where and how to download the source code for a particular piece of software. 4
- You've been using GitHub for a while, but apart from a little clicking on the web interface, you haven't dealt with it much yet. Now you want to get more involved and above all try this ominous Git.
- You've been using Git for a while and now you want to get to know the features of Git Hub.

I wrote this book primarily for beginners who have either not yet dealt with GitHub or have only recently dealt with GitHub. Pro fis, on the other hand, will probably not find much new in terms of content.

I assume that you can handle the operating system of your choice (e.g. Windows, macOS, Linux, etc.) on your computer at application level. You can e.g. Open a browser and access a website, install software, create a directory, and create and copy files.

For whom is this book not suitable?

For whom is this book probably nothing?

You want to deal intensively with Git and dive into the deepest

depths, GitHub interests you - if at all - only marginally. However, we will **only treat** Git relatively superficially. I give reading recommendations for a deeper introduction in Chapter 7, section »Continue to get smart about Git« on page 160.

- Your first activity after breakfast is to review all pull requests received and do a few merges before you
- 2 Spoiler: No, you don't have to.
- 3 GitHub professionals will probably frown on this, but that's exactly the question that newcomers ask themselves. And spoilers: We will clarify this question together.
- We also clarify this question, but if this is your only one on GitHub, I recommend you a corresponding web breaker rather than this book.

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after noon look at all the new issues and at coffee time think about whether even a new branch would be due.

- You are looking for a tool for your company that should support collaborative work. You are interested in the business-relevant information, e.g. which business features GitHub offers, how you could host it yourself and whether the business case pays off.
- You love hard-hitting IT facts and find it silly to try to explain
  IT using examples, images, or comparisons.5
- You find footnotes annoying.6

Since GitHub is a living platform, it may be that a lot has changed after printing the book. Buttons could be in another place, presented GitHub projects (also called repositories or repos for short, translated »placeof use«) no longer exist or be orphaned or new features are available. However, this should not be a problem, as this book describes the basic processes, so you should also find your way around a changed user interface with this knowledge. I will use the terms project and repository interchangeably over the course of this book.

#### The reader?

Personally, I'm a big fan of involving all people equally , which is why I think the generic masculine is no longer up-to-date. To Leser\_in constructions such as "Mein\_e der\_die reads my book" or To avoid "my reader who reads my book", depending on the con text, I will either make an mention ("readers"), use the gene of the asterisks ("readers"), the generic masculine ("the reader") or the generic feminine ("the reader"), which always means all genders.

#### How to read this book?

Some people read a textbook from cover to cover, others spin into the chapters that sound attractive to them. I designed this book so that a bloody beginner **should** read it from front to back. If you already have some experience, a »chapter hopping« may be useful, for example if you already know how to use your own project on Git-

- 5 In this book, we will renovate houses, beautify children's costumes, get teenagers to clean the kitchen and load trucks ...
- 6 Don't look at me like that, I copied it from Christina Czeschik and Matthias Lindhorst from »Weni ger schlecht über IT schreiben«. A book that I can highly recommend by the way!
- 7 https://from. wikipedia.org/wiki! Generisches Maskulinum

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Hub, and just want to know how to find open source projects that you want to support. Then it may make sense to jump into the corresponding chapter. Personally, however, I recommend a complete, linear reading, and not only because I have made so much effort:).

This book contains many links to other GitHubRepositories and websites. There A few therefrom expensive abzutippen are Find of the they at you the Research to facilitate, also in this repository on



GitHub: https://github.com/githubbuch/ githubbuch.github. I (see too Illustration 1).

Figure 1: All links in this book are in the repository https://lgithub.com/githubbuch! githubbuch.github.io to find.

#### Conventions in this book

I don't know about you, but whenever I read the section heading "Conventions" in a book, I prefer to skip the chapter because there is usually nothing exciting in it. In this respect, I will keep it short.

We will work partly on the console (on Windows often called a prompt, see Figure 1). I will present this as follows:

\$ Is file.txt

If I want to show exemplary inputs on the console, i.e. something that
you should not type one-to-one, I choose capital letters:
\$ vi filename

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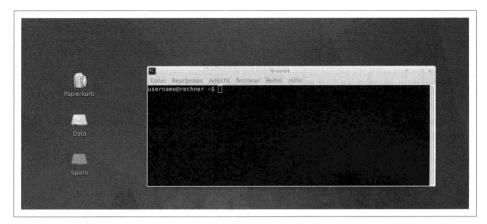


Figure 1: Unlike a graphical interface, the console is a text-based interface to the operating system and provides direct access to operating system resources and programs.

Here the text editor vi should **be** started with a file of your choice, FILENAME serves as a placeholder. If you have not yet worked with the console and its **editions**, I have written a section for you (see Chapter 7, section "Digression: Dealing with the Console" on page 139).

Console commands or excerpts from code examples in continuous text re displayed in listing font. URLs, e-mail addresses, file names, or file tensions are formatted in italics.

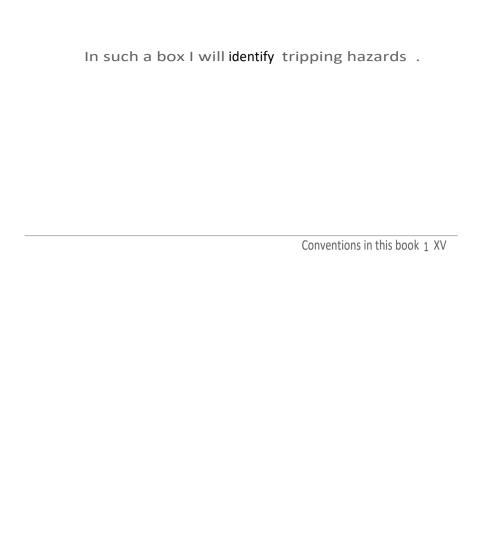
Tips, notes and everything I think is worth highlighting come in the following cute boxes:



# Tippkasten

In such a box, I will briefly highlight important hints, tips, tricks and best practices that I think could be helpful and/or interesting.

Stumbling blocks and everything that could make life harder if you do not know and pay attention to it, I will write in such boxes:



For longer explanations, there is the »Explanatory Bear Box«:

#### Erklärbärbox

In these boxes there are longer explanations on a specific topic, which would disturb the reading flow in the "normal" text. If the topic does not interest you or you already know about it well, **YOU** can simply skip these boxes.

Afew things that I think would disrupt the flow of reading, I will put in footnotes: for example, web addresses, details that are not necessarily important for further understanding , and also personal comments.

### Thanksgiving

Acknowledgements are often boring for readers, so I'll make it short and painless:

- First of all, I would like to thank my husband Rüdiger, who often enough had to lure me out of my writing tunnel while writing or had to endure my enthusiasm for any technical details.
- Further thanks are due to all my readers who read the book in Tei len and gave me feedback: Henry Hillje, Alina Robbers, Halil Ege, Jan Schnedler and (again) Rüdiger.
- Then there were a few crazy people who read the book as a whole and also gave me very helpful feedback: Julia Barthel, Florian Diedrich, Sven Riedel, Nina Siessegger and Ayleen Weiß. Thanks to your support , some praxitips have been incorporated, I was able to clear up some ambiguities and have also kept my wordy writing flow a bit in check;-).
- Thanks also to my editor Ariane Hesse, who (hopefully) found all the stumbling blocks and thus made this book a better one.
- I don't want to forget Christina Czeschik and Matthias Lindhorst, both authors of the book Weniger schlecht about IT, who inspired and motivated me to write a Buch myself through

their book. Thanks for that!

I would also like to thank the open source community. Without the tireless support of these people, the (software) world would be a poorer one. I will therefore donate part of the book proceeds to some open source projects.



Git as a support tool for this book

This book was created using Git. For this I have 882 Committed to the master branch .

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