Leanpub Sample Technical Book

Sample Technical Book
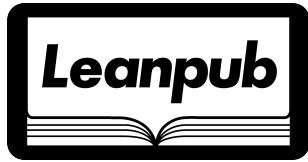
This is a Leanpub book, for sale at:

http://leanpub.com/sampletechnical

Leanpub helps authors to self-publish in-progress ebooks. We call this idea Lean Publishing. To learn more about Lean Publishing, go to: http://leanpub.com/manifesto

To learn more about Leanpub, go to: http://leanpub.com

Contents

Acknowledgments

We'd like to thank all Leanpub authors for making the product better!

Preface

In this sample Leanpub book we will show you how to write a Leanpub book.

Introduction

This book obviously has very short chapters and sections, since it's a sample. Your book will be much longer and more interesting!

The way to use this sample book is to read both the PDF file and the .txt files as well as the Book.txt and Sample.txt files. The PDF file is in the preview and/or the published folder; the .txt files are in the manuscript folder. (The preview folder only exists if a book preview has been generated on the Preview page; the publish folder only exists if a book has been published on the Publish page.)

So that you can experiment with the Leanpub book format, we have made this sample book content be the default content of a new Leanpub book. In fact, you may be reading this content in your own book right now.

We make the content appropriate to the book type:

- New Technical books start out with the content in http://leanpub.com/sampletechnical[1]

- New Business books start out with the content in http://leanpub.com/samplebusiness[2]

- New Fiction books start out with the content in http://leanpub.com/samplefiction[3]

The reason that these books are different is that we don't want you to waste your time reading about how to do external code samples if you're writing a business or fiction book. Also, the page sizes and image sizes are different, etc.

If you're in your own book, the first thing we encourage you to do is to make some small change (like deleting this sentence) and going to the Preview page and previewing a new version of your book. Once the preview is done, you will have a preview folder in your book's Dropbox folder. By taking a minute to do this, you'll see how easy it is to edit a Leanpub book.

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[1]http://leanpub.com/sampletechnical
[2]http://leanpub.com/samplebusiness
[3]http://leanpub.com/samplefiction

1

Markdown

1.1 Why Should You Care?

A Leanpub book is composed of a bunch of Markdown files.

The order of these files is defined in a file called Book.txt, which is in the same folder as this file.

To learn about the syntax and philosophy of Markdown, see this article by John Gruber[1].

Briefly, Markdown is a nice way of writing content which is easily transformed into HTML. For example, # at the beginning of a line becomes an h1, ## becomes an h2, ### becomes an h3, etc. Lists, paragraphs and other formatting is also intuitive.

1.2 How Markdown is Used in Leanpub

Even if you know Markdown, you need to learn a few things about how we use it at Leanpub.

Heading Levels Become Chapters and Sections

First, we use # chapters, ## for sections and ### for sub-sections. (You can also use #### for sub-sub-sections, but don't get carried away! Most technical books are good with just #, ## and ###, and most business and fiction books are good with just # and possibly ##.)

So, if you look at the top of the Markdown.txt file you'll see that it has one #, meaning it is a Chapter.

Another thing this means is that one file can contain as many chapters or sections as you want: every # makes a new chapter; it has nothing to do with what file it is in. However, we strongly recommend having one file per chapter (or one file per chapter section), since it makes creating sample books easier and keeps your book directory cleaner. Since we recommend this, that's what we'll do in this example book.

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[1]http://daringfireball.net/projects/markdown/syntax

Links Become Footnotes

We support Markdown syntax for links, as well as normal HTML links. Both of these are converted into functioning footnotes in the PDF. Here's an example of a link to Leanpub[2].

1.3 Markdown Extensions in Leanpub

We've made a few additions to Markdown for use in Leanpub. Two of the most important are tables and crosslinks. Furthermore, since Leanpub is so good for technical books, we also support extensions for external code samples, special directives for code syntnax highlighting, etc. If this is a technical book, you will see these discussed in the Code Samples chapter.

Tables

Creating a table in a Leanpub book is relatively simple. Here's an example:

First Name	Last Name	Email
Peter	Armstrong	peter@leanpub.com
Scott	Patten	scott@leanpub.com

Yes, that's it!

Crosslinks

A crosslink lets you refer to another element of your book. For example, you can refer to another section or figure, even if it's in a different chapter.

Creating crosslinks is a two-step process.

1. You need to set a name for the thing you want to link to. For example, you can name any chapter or section by putting {#some-name} after the chapter title.

2. You need to link to it in the text. You do this with a regular Markdown link with a target of "#some-name"; for example this is a cross-link to the Why Sample Books section in the Sample Books chapter.

Note that for standalone crosslinks, this only works when the anchor {#some-name} is at the beginning of a section.

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[2]http://leanpub.com

Footnotes

To add a footnote, you insert it like this[3] and then you define the footnote content later. That's it. Then you can keep writing content after the footnote content definition as well.

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[3]This is the footnote text.

Sample Books

2.1 Why Sample Books?

Leanpub lets you create a sample book, which readers can download for free to help them decide whether they want to buy the real book.

To do this, you create a file called Sample.txt in the same folder as this file and the Book.txt file. Note that, like Book.txt, the Sample.txt file is just a list of files. It's supposed to be a smaller list than what is in Book.txt, or else you're giving your whole book away! If you don't want a sample book, just don't create the Sample.txt file, or delete it if you already created it.

2.2 Consequences for Manuscripts

One consequence of this approach to specifying a sample book is that it's an "all or nothing" decision to include a file. If you include a file, all the chapters and sections in it are included. Because of this, we recommend a couple things:

1. Either use one chapter per file, or one section per file.

2. Never let a section span multiple files.

These two guidelines mean that your sample book is a lot less likely to have problems. If you don't follow them, things can still work, but you can sometimes create a situation where your book will be created fine but your sample book will not. Basically, when we create a book or a sample book, we stick all the content in all the included files together. If you do things like include a section (sections start with ##) but not the chapter that contains it (chapters start with #) your book will look a bit funny.

So, if you use the "one chapter per file" approach, things will just work. If you use the "one section per file" approach, make sure you include the first section in every chapter.

3

Images and Cover Pages

This chapter shows how you include an image.
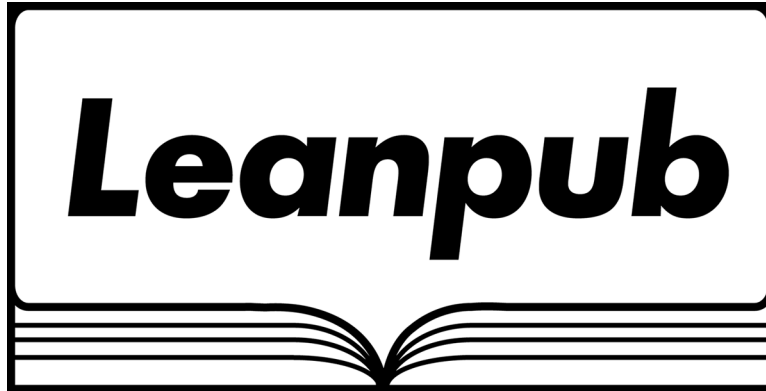
This is the Image Caption

That's it! (See this web page[1] for details on images in Markdown.)

We support PNG, JPEG and GIF formats for images.

Note that it's important to get the size and the resolution of the image right:

- We use **300 pixels per inch (PPI)** in our books, and we recommend you use that for your images. Any smaller PPI is scaled up to 300 PPI. Since we scale up to 300 PPI, your image may look blurry if it's a smaller PPI.

- If you save your image in a 300 PPI format, a 1200 pixel wide image takes 4 inches (1200 pixels / 300 pixel per inch = 4 inches)

- However, if your save your image in a 72 PPI format (the default in most programs), it can only be 288 pixels wide (72 PPI * 4 inches = 288 pixels). If it's wider, it will bleed into the right margin, and if your image is much too big it may not show up at all. (Please don't use 72 PPI though, since scaling looks like absolute garbage!)

Different book types have different default paper sizes. Each different paper size has a different maximum image width, before your image will bleed over the margin.

Currently all Leanpub books have 1 inch margins.

Before we get into specifics there's one really important thing to note.

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[1]http://daringfireball.net/projects/markdown/syntax#img

3.1 Watch Your File Sizes!

Before publishing your book, you should look at the sizes of your images in the images directory. If your images are huge, your book will be too. This is especially true at 300 PPI – the images are a lot bigger than you're used to at 72 PPI.

A simple tip to avoid problems is to use JPEG for all photographs, and to use 80% quality or lower. For figures that are drawings instead of photographs, PNG will look better than JPEG. You should be fine with PNG for these, since drawings typically produce files that are a lot smaller than photographs.

Next, here is what you need to know for the different Leanpub book types…

3.2 Technical Books

A technical book defaults to 8.5" x 11" paper. Subtracting margins, you have 6.5" x 9" to work with. So your image can be up to 1950 pixels wide and up to 2700 pixels high at 300PPI. Your cover page uses the full page width, so it should be exactly 2550 pixels wide and 3300 pixels high at 300 PPI. If this is a technical book, the default title_page.jpg shows you an example of this.

3.3 Business Books

A business book defaults to Digest paper (5.5" x 8"). Subtracting margins, you have 3.5" x 6" to work with. So your image can be up to 1050 pixels wide and up to 1800 pixels high at 300PPI. Your cover page uses the full page width, so it should be exactly 1650 pixels wide and 2400 pixels high at 300 PPI. If this is a business book, the default title_page.jpg shows you an example of this.

3.4 Fiction Books

A business book defaults to Digest paper (5.5" x 8"). Subtracting margins, you have 3.5" x 6" to work with. So your image can be up to 1050 pixels wide and up to 1800 pixels high at 300PPI. Your cover page uses the full page width, so it should be exactly 1650 pixels wide and 2400 pixels high at 300 PPI. If this is a fiction book, the default title_page.jpg shows you an example of this.

4

Code Samples

Chapters contain sections, which is where the bulk of your content should be. A section contains text, and can include images and code samples.

This section will show how a code sample works. Here is a code sample:

```ruby
#!/usr/bin/env ruby
puts "Hello World, I'm a code sample in an e-book!"
```

Here is another sample:

```ruby
#!/usr/bin/env ruby
puts "Hello World, I'm the code sample number #{1+1} in an e-book!"
```

This text is after the code sample.