

Packt>

Template:
LEARN



USE CASE: LEARN A TECHNOLOGY IN A SYSTEMATIC MANNER

The *Learn* title will enable your reader to learn a technology in a systematic manner. It's a logical progression through a topic or technology that provides **comprehensive coverage**.

A *Learn* book **introduces your reader** to a new technology or topic. It doesn't simply present it to them, but **guides them** through the world of the tool, and **trains them** in its effective use.

Your book needs to provide the reader with **rich, useful information** and instructions. It needs to give the reader an understanding not just of what the tool is and how it works, but **when and how they can use it in real life**.

Audience

Remember to think about the following:

- › **Prerequisites:** knowledge that the customer will need to have in order to use the book
- › **Learning outcome:** the knowledge the customer will have and the level they will be at once they've completed your book

The reader learns the concepts, principles and fundamentals of a technology or tool so that (by the time they have finished the book) they understand the fundamentals of a particular topic area. Remember to keep the book **practical** – focus on what the reader will **do**, not what you will tell them.

Features of the *Learn* Series



Modular content: Almost like lesson plans – so that your book can be used for reference.



Practical application: A practical approach to learning is key, and the focus should be on providing the practical skills required to develop applications.



Developer to developer: Your audience is professional developers – you're writing to a peer.

Learn Reader Profile

Knowledge Level	Book Objective	Starting Point	End Point
New to Tech	Examines the fundamentals of the technology	No knowledge or exposure	<i>Working Knowledge:</i> Basic proficiency with technology

Think of each chapter like a **lesson plan** – it should relate to the chapter previously, but should also **sit entirely independently** of it. It needs to facilitate micro-learning. Not many readers will go through the book from cover to cover – they will dip in and out looking for the content that is relevant to them. For this reason, Packt books have a modular structure that lets the reader **pick and choose the content** they need, when they need it.

Consider the **reader journey**, as described in the *Author Guidelines*. This allows us to anticipate how they are going to *feel* as they use the book. This in turn, helps us to structure the book.

Early Chapters

Introduction

In the introduction you need to establish the following:

1. The problem that your book exists to solve

Give the reader a clear idea of what they'll learn and achieve by reading your book. Describe the skills they will gain and the things they will build.

2. Introduction to the topic

Familiarize the audience with the big picture and major concepts that you'll explore. Describe the rationale behind your topic inclusion and the sequence that they are presented in. This should:

a. Spell out context: General concepts of the technology or topic

b. Drill down to the area that you're going to be focusing on – that is the fundamental, underlying principles of the technology. This might also include an explanation of terminology, for example.

3. Inform the reader about **the things that they need to know before they start**. Remind the reader of the things that they should already know and then show them where you are going to take them.

a. Prerequisite knowledge: assume that the reader will have little knowledge of or exposure to the technology.

b. The learning outcome: tell the reader what they will know at the end of the book

4. Any **installation guidance and information** they need to get set up.

5. Summary

Bring together everything you've mentioned in the introduction, and summarize it in around 300 words.

Book Structure

Chapter 1

Remember the reader journey described in *The Author Guidelines* document? It's important at this stage that your **reader feels encouraged** – focus on getting the tool installed and then do something they will find relatively easy with this.

Start with something that gathers your readers and brings them to a common level – a '**refresher**' on the skills that they already have.

Middle Chapters

There are a number of ways in which you could order the content:

1. **Increase in complexity** as you progress through the book – this gives the reader the feeling that they are getting better and better as they progress. Go from simple to advanced.
2. **Go from common to rare**, put the most useful information at the start of the book.
3. **Go from early to late**, put topics in the order of their natural progression.

If there isn't an obvious order to the content, then do what is logical to you.

If appropriate, have a '**bringing it together**' chapter towards the end. You might like to build an app that draws on knowledge from previous chapters.

The Last Chapter

Finally, **tell the reader what they now know** – and **congratulate them** on finishing your book!

Suggest the **next steps** that they might want to take in order to move onto the next level.

Your Editor is here to help, so be sure to discuss this with them – we've got plenty of helpful books to suggest.



Chapter Structure

04

Chapter Header: Main topic – include SEO keyword(s), if possible

- Introduction
- Learning Outcomes

Technical Requirements

- List of Technologies, installations required

Topic A

- Explanation and overview

Subtopic A

- Explanation/essential concepts
- Examples, code, illustrations: explain complex concepts in clear, simple language
- Advice/Guidance/Pain points: Address common pain points and areas of confusion.

Subtopic B

- Explanation/essential concepts
- Examples, code, illustrations: explain complex concepts in clear, simple language
- Advice/Guidance/Pain points: Address common pain points and areas of confusion.

Subtopic...

Topic B

- Explanation and overview

Subtopic A

- Explanation/essential concepts
- Examples, code, illustrations: explain complex concepts in clear, simple language
- Advice/Guidance/Pain points: Address common pain points and areas of confusion.

Subtopic B

- Explanation/essential concepts
- Examples, code, illustrations: explain complex concepts in clear, simple language
- Advice/Guidance/Pain points: Address common pain points and areas of confusion.

Subtopic...

Summary

Q&A

Further Reading

Opening Pages

The opening page of a chapter should start on a right-hand page, and include:

1. A **chapter number**
2. The **chapter header**: Clear chapter titles that explicitly state the topic of the chapter. Include an **SEO keyword**, because your book's **table of contents** (and therefore the chapter headings) are important for making sure your book can be **found easily on Amazon, Google** and other sites.
3. An **introduction** (50–100 words) explaining the content of the chapter. Start with a couple of sentences summing up the goals of the chapter, relating it to the overall thread of the book (where we've come from, where we're going).

Be careful here – remember that the chapter needs to sit independently of the others. Don't assume the reader has read the book from start to finish. They haven't – they'll dip in and out as they need to!

4. A **bulleted list of learning outcomes** – these will correspond with the main H1 headings in the chapter (this list should include **page numbers** for ease of reference)
5. A **bulleted list of clear technical requirements**: list of technologies, installations required. Provide the Git Repo for the code bundle for the chapter.



Topics and Subtopics

Sections: Each chapter should have around 3–7 main sections, each introduced with a heading – this is labeled **Heading 1** in Type Cloud.

Packt's research and experience over many years has highlighted the **importance of skim reading** to readers. For this reason, sections shouldn't be too long. If the subject matter requires a very lengthy section, then make sure that it's **broken down into logical sub-sections** (using **Heading 2, Heading 3 etc.**, in Type Cloud)

In a *Learn* title there are four main kinds of content:

- 1. Explanation and Overview:** Describes how the content contributes to the overall goal of the book, and to the reader's objectives. Informs the reader *why* they need to know something, and *how* it will fit into what they want to do. How will it be *useful*.
- 2. Essential Concepts:** Provide essential theory (what things are and how they work) and tell the reader how it is used (provide some instructions on how to go about doing something).
For example: 'How to use the `input()` function'.
- 3. Explanation:** Using examples, code and illustrations, explain the concept previously described. Take the reader through it, helping the reader understand what they see or what happened.
- 4. Advice/Guidance/Pain points:** Provide advice and guidance by giving the reader the benefit of your experience and expertise. Packt has **tips** and **warnings** icons that you can use to highlight anything particular.

You might want to use the above in the order that it has been presented. Alternatively, feel free to mix it up – but aim for an even balance of each.

Once you've done this, you're ready to move on to the next topic/subtopic.



Definitions

Chapter Summaries

The **chapter summary** captures the key points and reinforces the structure. You need to remind the reader of what they have just learnt. Aim for a maximum of 200–300 words.

Q&A

End each chapter with 7–10 questions. Questions are a way of letting your reader test how well they've learned the material. They are also a useful learning aid, helping the reader to reflect on and think about what they've read.

1. Start with factual and **comprehension-based questions**.
2. Include some **application-based questions** – when, how, why, where.
3. End with some **'challenge'** questions – questions that are not directly answered in the text and require the reader to try things out.

These might be practical challenges: how would you write code to solve problem x?

Remember to provide answers to the questions in the section at the back of the book called **Assessments**.

Further Reading

You can include additional references to useful third-party resources, or other Packt books that might help explain a particular concept in further detail here. If you discuss a further technology – a library, for example – then highlight the *Learn* title that the reader will find useful.

If you have mentioned a particular concept that you can apply the technology to you might like to highlight the *Hands-On* book that deals with the concept.



Want to get in touch with Packt?

Want to get in touch and let us know your thoughts, feedback or anything else which springs to mind? We'd love to hear from you – drop as a line at authorsupport@packt.com

Useful Contact Details

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