second example

Mickey Mouse

14. September 2012

Inhaltsverzeichnis

Kapitel 1

Not so Simple

As you can see, this example is a bit more elaborate, and will allow us to introduce **latex commands**, **latex packages**, and the **latex table of content**.

1.1   Commands and Parameters

Latex commands are introduced by a backslash, and possibly have parameters, which might be enclosed in curly braces.

Some commands come in pairs, with a beginning command, the corresponding ending command, and the content encapsulated in between.

Following `\commandname`, there may be one or more parameters. Optional parameters are enclosed in square brackets. Required parameters are enclosed in curly braces.

So the structure of a command in latex looks like this:
`\commandname[option1, option2]{parameter1, parameter2}`

`\documentclass` is a command too, and as you can see, here we define the optional paper size to be A4.

1.2   Packages

If latex's default behavior, and processing isn't suitable for you, it's possible for you to customize it through some changes. When those changes are frequently useful, you can move those changes into what latex calls packages. That helps keeping your documents uncluttered with changes not related to the content.

This simplifies the process of distributing those changes so that others having the same need won't have to go through the trouble you already went through. All they have to do is download your package, and then use the package.

This works in the other direction too: if you have a need, and somebody already published a package for it, you can grab it and use it. This is what we do in this document's preamble with the three `\usepackage` latex commands.

The first 2 setup the font and text encoding. You'll want to have them in every document you write.

The third command asks latex to use the package *babel* with the option *ngerman*. It is used to tell latex in which language the document will be, here *ngerman* means new German. The language setting defines certain things

for you. The `\chapter` command for instance, renders as *Kapitel*, and the `\tableofcontents` as *Inhaltsverzeichnis*.

Kapitel 2

second chapter

2.1 Document title and Table of contents

The command \maketitle generates a title page for you from the document metadata, also called **top matter** in LaTeX.

It's inserted for you in the resulting document right where the command is called in the source document.

\tableofcontents generates a table of contents for you from all the headers in the document, and inserts it for you in the resulting document right where the command is called in the source document.