

A file with several indexes

Wilberd van der Kallen

April 2018



# Contents

<b>Contents</b>	<b>iii</b>
<b>Preface</b>	<b>v</b>
<b>1 Introduction</b>	<b>5</b>
<b>A Structure of the <math>\LaTeX</math> file</b>	<b>7</b>
<b>B Purpose of <code>robustindex.sty</code></b>	<b>9</b>
<b>Index</b>	<b>10</b>
<b>Index bis</b>	<b>11</b>
<b>Index with tag a1</b>	<b>12</b>
<b>Index with tag b1</b>	<b>13</b>
<b>Index with headings</b>	<b>14</b>



# Preface

This file illustrates some features of the `robustindex` package with option `multind`. This option supports multiple indexes.

Although this is not a book, we have chosen the book style for illustration. Let us say we want to use four indexes. First we choose tags to identify them. In this file we use the tags `main`, `bis`, `a1`, `b1`. With the `\setindex` command we activate an index. Thus `\setindex{main}` tells L<sup>A</sup>T<sub>E</sub>X that the active index is now the index identified by the tag `main`, until the next `\setindex` command. If a tag has not been encountered before, then a new index with that tag is created. The tag `main` is always known and the index with tag `main` becomes active at the `\begin{document}`. The `\index` command and the `\printindex` commands write to/from the active index.

If you wish you may use `\sindex[bis]{entry}` as shorthand for

```
\setindex{bis}\index{entry}
```

and `\sindex{entry}` as shorthand for

```
\setindex{main}\index{entry}.
```

To see how option `multind` may be used, you may also compare the file `multisample.tex` with the output.

This preface has an *indexed term*. (You see this in the source file only.)



# Chapter 1

## Introduction

This introduction has another indexed term as well as the old indexed term. The page number is again 5, but now in arabic. If you index the same term twice on the same page, then one simply gets a repeat in the index. That is inherent in our method. Indeed we had to disable the implicit page range formation of `makeindex`.

The index file `filename.ind` has become quite unreadable. Do not edit it. Use the option `multind` only if you are willing to keep the indexes standard. Note that if you open a page range you must close it again with the same index active as when you opened the range.

We have hacked various mechanisms of `makeindex`. Subentries are still supported. We illustrate this in `multisample.tex` and appendix [A](#) with alpha, beta and gamma. This also illustrates the use of `\gobblepageref`, a variant of `\see`.

After running L<sup>A</sup>T<sub>E</sub>X on `filename.tex` one must run `makeindex` on `filename` to get the index entries in `filename.ind`. Before this there may be error messages about labels or names. Do not exclude any relevant files. For instance, do not use `\includeonly`.

The package `hyperref` may break our code. Therefore one must use the option `hyperindex=false`, as in `\usepackage[hyperindex=false]{hyperref}`. Note that `robustindex` already puts hyperlinks in the index. Alternatively one may go against the advice of `hyperref` and put `robustindex` later in the preamble. In the file `multisample.tex` we actually used `\usepackage[plainpages=false,hyperindex=false]{hyperref}` because of the roman page numbers in the beginning.





# Appendix A

## Structure of the L<sup>A</sup>T<sub>E</sub>X file

```
\documentclass{book}

\usepackage{makeidx}
\usepackage[multind]{robustindex}
\usepackage[plainpages=false,hyperindex=false]{hyperref}
...
... \author{Wilberd van der Kallen\index{wilberd@Wilberd}}
...
\makeindex % obligatory with robustindex

\begin{document}
...
\tableofcontents
... \index{indexed term} % on page v
...
... \index{other term!cited twice on same page} % on page 5
... \index{indexed term} % on page 5
... \index{other term!cited twice on same page} % on page 5
...
\setindex{a1}\index{alpha!see beta} % on page 5
\index{alpha!see also gamma\gobblepageref} % on page 5
...
\indexincontents % before the index.
\setindex{main}
\printindex
...
\renewcommand{\indexcapstyle}[1]{\indexspace\textsc{#1}\par}
\renewcommand{\indexname}{Index with headings}
\setindex{main}
\printindex
\end{document}
```



## Appendix B

# Purpose of `robustindex.sty`

Amazingly often a third party changes the page numbers without rerunning `makeindex`. It is much nicer to have indexes that adapt themselves to all changes that do not involve `\index{entry}` commands.

The package achieves this by invoking the `\pageref` mechanism on automatically generated labels of the form `ind.2`, `ind.4`, `...`

Only after adding/deleting/modifying an `\index{entry}` command, or after changing the order of `\index{entry}` commands, does one have to run `makeindex`. But then it is important that you do run `makeindex`, even when no warning is issued. The robustness has its limits.

With option `multind` the package supports multiple indexes. But one still works with the standard compilation sequence  
`latex filename.tex`, `makeindex filename`, `latex filename.tex`.

# Index

alpha, 8  
animal  
    ruminant  
        cow, 8  
        fish, 8  
  
delta  
    vardelta, 8  
  
time  
    now, 8  
  
z, i

# Index bis

bis, 8

# Index with tag a1

alpha

see also gamma

see beta, 5

gamma, 8

other term

cited twice on same page, 5, 5

# Index with tag b1

as

is, 8

indexed term, v, 5

page range, 5-9

this |is| complicated, 5-8, 9  
with risky label, 9

simpler

page range, 5-9

simplest page range, 5-9

tris, 8

Wilberd, i

# Index with headings

A  
alpha, 8  
animal  
    ruminant  
        cow, 8  
        fish, 8

D  
delta  
    vardelta, 8

T  
time  
    now, 8

Z  
z, i