ltxindex: Making LaTeX indexes with GNU's `texindex`*

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ltxindex is a simple package to make indices for LaTeX documents with `texindex` instead of `makeindex`. Though missing some important functionality, `texindex` seems much simpler to use; and if you don't need anything fancy, such an index may be useful.

This package only implements the standard indices used by texinfo, and only defines the concept index (cp) by default. You can't define custom indices (yet), and you must set up the fn, ky, pg, tp, and vr indices on your own.

1 Usage

Call this package in the preamble: `\usepackage{ltxindex}`

The package implements the following commands,

`\cpindex{`⟨*concept*⟩`}` indexes *concept*, without typesetting it in the main text.

`\cpsubindex{`⟨*concept*⟩`}{`⟨*subconcept*⟩`}` indexes *subconcept* under *concept*, without typesetting it in the main text.

`\indexcp{`⟨*concept*⟩`}` typesets *concept* and puts it in the `cp` index.

`\subindex{`⟨*subconcept*⟩`}{`⟨*concept*⟩`}` typesets *subconcept* in the main document and puts it under *concept* in the `cp` index.

You may set up fnindex, kyindex, pgindex, tpindex, and vrindex with the command `\newindex{`⟨*??*⟩`}`, where `??` is either fn, ky, pg, tp, or vr. This way, you enable commands `\??index{`⟨*word*⟩`}`, which allows you to index *word* in the appropriate index. Texinfo's shortcuts `\cindex`, `\findex`, `\kindex`, `\pindex`, `\tindex`, and `\vindex`, are also available.

`\synindex{`⟨*foo*⟩`}{`⟨*bar*⟩`}` subsumes index *foo* under index *bar*.

`\syncodeindex{`⟨*foo*⟩`}{`⟨*bar*⟩`}` is similar, but typesets all entries for index *foo* in boldface.

As in Texinfo, all these commands produce auxiliary files `<filename>.??`

Once you're done with the main body of your document, you ask LaTeX to typeset the index with the command `\printindex{`⟨*??*⟩`}`, wherever you like. Make

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*This file documents version v0.1b, as of 2004/06/30. Please send comments and bug reports to jlrn77 at gmail dot com.

sure you precede it with some informative heading, like `\section*{Concept Index}`. In short:

Run LaTeX on filename to produce the `.aux` and `.??` files

Run `texindex` on every unsorted index file (`<filename>.??`) you created for your document (`<filename>.cp`, by default). `texindex` will create a sorted index file for your index file (`<filename>.cps`, by default).

ReRun LaTeX to incorporate the indices.

ReRun `texindex` on every index file (to ensure right cross-references).

ReRun LaTeX to put everything in order.

You may avoid all this work in drafting and proofreading: the package prints "(Index is empty)" or "(Index is nonexistent)" in the appropriate places if the indices are unsorted or undefined.

2 Acknowledgements

As you may see by simple inspection of the code, I just "borrowed" the code from the old `latexinfo.sty`, available on CTAN, and patched it up to run as a LaTeX package. Thus, all credits should go to Richard Stallman, Robert J. Chassell, & Michael Clarkson.

3 To Do's and Warnings

- Two column output is somewhat clumsy; you may have to edit the `.??s` file manually to add `\columnbreak`'s in the appropriate places.

- Devise a more general mechanism to create arbitrary indices.

- Write some macros to modify the appearance of the index (by means of some commands or package options).

- PDF is not supported at all.

- Documentation is wanting; I may improve it when I implement user-defined indexes.

- There is something odd about the license of this package.

  This package is distributed along the lines of the GNU General Public License version 2.0, in compliance with the original license for `latexinfo.sty`.

  There are additional conditions imposed on the use —not the distribution— of the package, due to the usage of the multicol package, by Frank Mittelbach. Even though multicol is a required file for any LaTeX installation, you

are *morally* required to pay a license fee if you use it as a part of a proprietary or commercially distributed product based on or using multicol. The ltxindex package is distributed 'gratis', so as long as you distribute or use this package for a non-commercial or non-proprietary end product (document or software), you don't acquire this moral obligation. Otherwise, you are morally required to pay that fee, because of the usage of multicol. See the file `multicol.dtx` for details.

Confused? Well, just comment out the lines containing the strings

```
\RequirePackage{multicol}
\begin{multicols}{2}
\end{multicols}
```

The output will be ugly, but free from moral trouble.

I may get around this odd situation when I implement another way of setting multiple columns independently of Mittelbach's package.