tagging.sty

A package for document configuration

Brent Longborough

28th August, 2011

Version: 1.0

CONTENTS

INTRODUCTION

tagging is a LaTeX package to help you easily to produce multiple editions of a document from a single source, or to reuse varying parts of an input file to produce more than one result at different places in a single document.

To use *tagging*, just include a standard `\usepackage{tagging}` in your document preamble; there are no package options.

With *tagging*, you mark up parts of your LaTeXsource code with *tags* — labels which make some kind of sense for you in relation to the document you are writing.

For example, imagine you are writing a car owners' manual.[1] The car can have optional features, such as automatic transmission or a navigation system, and can be powered by diesel or petrol.

In your source code, *tagging* allows you to mark up different parts of the text that are required (or not) for a particular label (such as **petrol**, **diesel**, **satnav**, and **auto** in this case).

Separately, you specify which of your tags you wish to activate; when you process the document, different marked pieces are then included or excluded in accordance with your markup and the active tags.

Alternatively, you might prefer to tag pieces of the document as applying to given models, by labelling them with one more model designations. For such an application, you would probably have a number of master document source files, each of which would activate the appropriate tags, and then input or include one or more source files containing the marked-up content.

Another application, such as writing standard letters, might involve simply changing the tags to be activated in the preamble of a marked-up source file.

Yet another application might involve describing the way in which something — an idea, an algorithm, for instance — has evolved. The description of the evolving thing could be labelled with its stages, and then repeatedly imbedded from a master source document with different active tags to reflect the stage in its evolution.

The possibilities are, if not limitless, at least very extensive. Here are a few more:

- Redacted v. unredacted
- Report v. management summary
- Teacher v. Student material
- Question v. Answer

---

[1]OK, I know Peugeot don't do this, but imagine a top-end luxury car manufacturer.

Tags and tag lists

All the commands and environments provided by *tagging* take a list of one or more tags as their first parameter. Each tag must consist of one or more alphabetic characters (A-Z,a-z)[2] which have some meaning for the user. A tag list is a set of one or more tags separated by commas.

Tagged text is included in the document, or excluded, if any of its tags is 'active' at that point in the document. Commands are available to include or exclude text based on its particular tag markup.

Examples:

Three tags:	`draft redacted student`
A tag list:	`draft,student,linux`

tagging does not (deliberately, anyway) restrict the use of tagging to text; it may also be used to control document setup and formatting in the preamble as well as in the body of the document.

Text tagging commands

The three markup commands provided by *tagging* take as parameters a tag list and some text to be included or excluded. Here they are:

\tagged{*<taglist>*}{*<source text>*}

If *any* of the tags in *<taglist>* is active, then the *<source text>* will be included as part of the document; if not, it will be excluded.

\untagged{*<taglist>*}{*<alt text>*}

If *none* of the tags in *<taglist>* is active, then the *<alt text>* will be included as part of the document; if not, it will be excluded.

\iftagged{*<taglist>*}{*<source text>*}{*<alt text>*}

This is a combination of \tagged and \untagged: If *any* of the tags in *<taglist>* is active, then the *<source text>* will be included as part of the document; if *none* of the tags is active, then *<alt text>* will replace *<source text>*.

---

[2]Sorry, I haven't yet worked out how to provide support for accented characters. I suspect it means messing with catcodes, so please don't hold your breath waiting for it

Tagged environments

tagging defines two environments: one to include and one to exclude text. As you might expect, these environments are both coded with a `\begin{}`-`\end{}` pair.

\begin{taggedblock}{*<taglist>*}

Source text placed inside a `taggedblock` environment is included in the document if *at least one* of the tags in *<taglist>* is active.

\begin{untaggedblock}{*<taglist>*}

Source text placed inside an `untaggedblock` environment is included in the document only if *none* of the tags in *<taglist>* is active.

Tag activation and control

The tag control commands determine which tags are active at any point in the document. The document starts with all tags inactive; *tagging* requires that you explicitly activate the tags you need.

Once a tag has been activated, it remains active from that point in the document to the point at which it is deactivated, or to the end of the document if not deactivated. All tags operate independently: activating or deactivating a given tag has no hidden effect on other tags.

\usetag{*<taglist>*}

This command activates *all* the tags in *<taglist>*.

\droptag{*<taglist>*}

This command deactivates *all* the tags in *<taglist>*. *tagging* is too simple to include a command to "deactivate all known tags" — sorry.

Tag nesting

It is possible to nest markup, though it maybe confusing unless you lay it out carefully. For example,

\tagged{lux}{\untagged{nav}{Sorry, something's wrong here!}}

would apologise if it's a luxury model without a satnav.

These examples show first the markup, then the formatted result in a box below it.

Example 1: Tailoring a simple letter

1a:

```
 1 \usetag{good}
 2
 3 Dear Don,
 4
 5 The results of your latest evaluation were
 6 \tagged{good}{excellent.}
 7 \tagged{bad}{disappointing.}
 8 \untagged{good,bad}{satisfactory.}
 9
10 \iftagged{bad}{I hope you will be able to improve.
11 Please let me know if I can do anything to help.
12 }{Keep up the good work!}
```

> Dear Don,
> The results of your latest evaluation were excellent.
> Keep up the good work!

1b:

```
 1 \usetag{bad}
 2
 3 Dear Don,
 4
 5 The results of your latest evaluation were
 6 \tagged{good}{excellent.}
 7 \tagged{bad}{disappointing.}
 8 \untagged{good,bad}{satisfactory.}
 9
10 \iftagged{bad}{I hope you will be able to improve.
11 Please let me know if I can do anything to help.
12 }{Keep up the good work!}
```

> Dear Don,
> The results of your latest evaluation were disappointing.
> I hope you will be able to improve. Please let me know if I can do anything
> to help.

Example 2: Tailoring a customer brochure

2a:

```
1 \droptag{deluxe} % Not needed here;  for    illustration    only
2 Welcome to your new mobile phone!
3 \iftagged{deluxe}{Tailored for }{For}  your convenience,
4 it  comes with:
5 \begin{itemize}
6     \item A screen
7     \begin{taggedblock}{deluxe}
8       \item A built−in microwave oven and Shrubbery
9     \end{taggedblock}
10    \item An operating system
11 \end{itemize}
```

> Welcome to your new mobile phone! For your convenience, it comes with:
> - A screen
> - An operating system

2b:

```
1 \usetag{deluxe}
2 Welcome to your new mobile phone!
3 \iftagged{deluxe}{Tailored for }{For}  your convenience,
4 it  comes with:
5 \begin{itemize}
6     \item A screen
7     \begin{taggedblock}{deluxe}
8       \item A built−in microwave oven and Shrubbery
9     \end{taggedblock}
10    \item An operating system
11 \end{itemize}
```

> Welcome to your new mobile phone! Tailored for your convenience, it comes with:
> - A screen
> - A built-in microwave oven and Shrubbery
> - An operating system

Acknowledgements and dependencies

tagging is based on an idea by Leo Liu. It would have been a lot more difficult to implement without the help of Philipp Lehman's etoolbox and of verbatim, currently maintained by Rainer Schöpf, both of which are required for *tagging* to work.

The TEX.SE community has been a constant source of help, inspiration, and amazement.

Of course, we all stand on the shoulders of giants: Donald Knuth, and then too many others to name.

Thank you all. Any failings that remain are entirely "an ill-favoured thing, sir, but mine own".

Copyright & licence

From the author

I hope you find this package useful. Please bear in mind that I am very much an amateur TEXnician, so *tagging* may be incompatible with some packages, and, if you find such an incompatibility, I may not have the skill to fix it.

However, I'll be very happy to receive your comments by email.

Enjoy!
Brent Longborough

brent+tagging (at) longborough (dot) org
and at TEX.SE