latexindent.pl

Version 3.0

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January 16, 2017

Abstract

latexindent.pl is a Perl script that indents .tex (and other) files according to an indentation scheme that the user can modify to suit their taste. Environments, including those with alignment delimiters (such as tabular), and commands, including those that can split braces and brackets across lines, are *usually* handled correctly by the script. Options for verbatim-like environments and indentation after headings (such as chapter, section, etc) are also available. The script also has the ability to modifiy line breaks, and add comment symbols.

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0.1 noAdditionalIndent and indentRules

0.1.1 Environments and their arguments

FIX

There are a few different YAML switches governing the indentation of environments; let's start with the simple sample code shown in Listing 1.

*and contributors! (See **??** on page ??.) For all communication, please visit [**latexindent-home**].

LISTING 1: myenv.tex

```
\begin{outer}
\begin{myenv}
  body of environment
body of environment
     body of environment
\end{myenv}
\end{outer}
```

noAdditionalIndent: ⟨*0* | *1* **OR** *fields*⟩

If we do not wish myenv to receive any additional indentation, we have a few choices available to us, as demonstrated in Listings 2 and 3.

LISTING 2: myenv-noAdd1.yaml

```
1 noAdditionalIndent:
2     myenv: 1
```

LISTING 3: myenv-noAdd2.yaml

```
1 noAdditionalIndent:
2     myenv:
3         body: 1
```

On applying either of the following commands,

```
cmh:~$ latexindent.pl myenv.tex -l myenv-noAdd1.yaml
cmh:~$ latexindent.pl myenv.tex -l myenv-noAdd2.yaml
```

we obtain the output given in Listing 4; note in particular that the environment myenv has not received any *additional* indentation, but that the outer environment *has* still received indentation.

LISTING 4: myenv.tex output (using either Listings 2 and 3)

```
\begin{outer}
  \begin{myenv}
  body of environment
  body of environment
  body of environment
  \end{myenv}
\end{outer}
```

Upon changing the YAML files to those shown in Listings 5 and 6, and running either

```
cmh:~$ latexindent.pl myenv.tex -l myenv-noAdd3.yaml
cmh:~$ latexindent.pl myenv.tex -l myenv-noAdd4.yaml
```

we obtain the output given in Listing 7.

LISTING 5: myenv-noAdd3.yaml

```
1 noAdditionalIndent:
2     myenv: 0
```

LISTING 6: myenv-noAdd4.yaml

```
1 noAdditionalIndent:
2     myenv:
3         body: 0
```

LISTING 7: myenv.tex output (using either Listings 5 and 6)

```
\begin{outer}
  \begin{myenv}
    body of environment
    body of environment
    body of environment
  \end{myenv}
\end{outer}
```

If we now allow myenv to have some optional and mandatory arguments, as in Listing 8,

LISTING 8: myenv-args.tex

```
\begin{outer}
\begin{myenv}[%
  optional argument text
        optional argument text]%
  { mandatory argument text
 mandatory argument text}
  body of environment
body of environment
     body of environment
\end{myenv}
\end{outer}
```

then running

```
cmh:~$ latexindent.pl -l=myenv-noAdd1.yaml myenv-args.tex
```

gives the output shown in Listing 9; note that the optional argument, mandatory argument and body *all* have received no additional indent. This is because, when noAdditionalIndent is specified in 'scalar' form (as in Listing 2), then *all* parts of the environment (body, optional and mandatory arguments) are assumed to want no additional indent.

LISTING 9: myenv-args.tex using Listing 2

```
\begin{outer}
  \begin{myenv}[%
  optional argument text
  optional argument text]%
  { mandatory argument text
  mandatory argument text}
  body of environment
  body of environment
  body of environment
  \end{myenv}
\end{outer}
```

We may customise noAdditionalIndent for optional and mandatory arguments of the myenv environment, as shown in, for example, Listings 10 and 11.

LISTING 10: myenv-noAdd5.yaml

```
1 noAdditionalIndent:
2     myenv:
3         body: 0
4         optionalArguments: 1
5         mandatoryArguments: 0
```

LISTING 11: myenv-noAdd6.yaml

```
1 noAdditionalIndent:
2     myenv:
3         body: 0
4         optionalArguments: 0
5         mandatoryArguments: 1
```

Upon running

```
cmh:~$ latexindent.pl myenv.tex -l myenv-noAdd5.yaml
cmh:~$ latexindent.pl myenv.tex -l myenv-noAdd6.yaml
```

we obtain the respective outputs given in Listings 12 and 13. Note that in Listing 12 the text for the *optional* argument has not received any additional indentation, and that in Listing 13 the *mandatory* argument has not received any additional indentation; in both cases, the *body* has not received any additional indentation.

LISTING 12: myenv-args.tex using Listing 10

```
\begin{outer}
  \begin{myenv}[%
    optional argument text
    optional argument text]%
    { mandatory argument text
      mandatory argument text}
    body of environment
    body of environment
    body of environment
  \end{myenv}
\end{outer}
```

LISTING 13: myenv-args.tex using Listing 11

```
\begin{outer}
  \begin{myenv}[%
      optional argument text
      optional argument text]%
    { mandatory argument text
    mandatory argument text}
    body of environment
    body of environment
    body of environment
  \end{myenv}
\end{outer}
```

`indentRules`: ⟨*horizontal space* ***OR*** *fields*⟩

We may also specify indentation rules for environment code blocks using the `indentRules` field; see, for example, Listings 14 and 15.

LISTING 14: myenv-rules1.yaml

```
1 indentRules:
2     myenv: "    "
```

LISTING 15: myenv-rules2.yaml

```
1 indentRules:
2     myenv:
3         body: "    "
```

On applying either of the following commands,

```
cmh:~$ latexindent.pl myenv.tex -l myenv-rules1.yaml
cmh:~$ latexindent.pl myenv.tex -l myenv-rules2.yaml
```

we obtain the output given in Listing 16; note in particular that the environment `myenv` has not received any *additional* indentation, but that the `outer` environment *has* still received indentation.

LISTING 16: myenv.tex output (using either Listings 14 and 15)

```
\begin{outer}
  \begin{myenv}
     body of environment
     body of environment
     body of environment
  \end{myenv}
\end{outer}
```

If you specify a field in `indentRules` using anything other than horizontal space, it will be ignored.

Let's now return to the example in Listing 8 that contains optional and mandatory arguments. Upon using Listing 14 as in

```
cmh:~$ latexindent.pl myenv-args.tex -l=myenv-rules1.yaml
```

we obtain the output in Listing 17; note that the body, optional argument and mandatory argument have *all* received the same customised indentation.

LISTING 17: myenv-args.tex using Listing 14

```
\begin{outer}
  \begin{myenv}[%
        optional argument text
        optional argument text]%
     { mandatory argument text
        mandatory argument text}
     body of environment
     body of environment
     body of environment
  \end{myenv}
\end{outer}
```

You can specify different indentation rules for the different features using, for example, Listings 18 and 19

LISTING 18: myenv-rules3.yaml

```
1 indentRules:
2     myenv:
3         body: "    "
4         optionalArguments: " "
```

LISTING 19: myenv-rules4.yaml

```
1 indentRules:
2     myenv:
3         body: "    "
4         mandatoryArguments: "\t\t"
```

After running

```
cmh:~$ latexindent.pl myenv-args.tex -l myenv-rules3.yaml
cmh:~$ latexindent.pl myenv-args.tex -l myenv-rules4.yaml
```

then we obtain the respective outputs given in Listings 20 and 21.

LISTING 20: myenv-args.tex using Listing 18

```
\begin{outer}
  \begin{myenv}[%
      optional argument text
      optional argument text]%
     { mandatory argument text
       mandatory argument text}
     body of environment
     body of environment
     body of environment
  \end{myenv}
\end{outer}
```

LISTING 21: myenv-args.tex using Listing 19

```
\begin{outer}
  \begin{myenv}[%
        optional argument text
        optional argument text]%
     { mandatory argument text
         mandatory argument text}
     body of environment
     body of environment
     body of environment
  \end{myenv}
\end{outer}
```

Note that in Listing 20, the optional argument has only received a single space of indentation, while the mandatory argument has received the default (tab) indentation; the environment body has received three spaces of indentation.

In Listing 21, the optional argument has received the default (tab) indentation, the mandatory argument has received two tabs of indentation, and the body has received three spaces of indentation.