The `diffs` package

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I wrote this little package for managing some issues in multi-writers working papers. It provides a few macros that allow for making comments in the text, and making changes (like adding or removing text) appear with the name of the writer that performed the change.

For using it, just include it in the header of your `.tex` file:

```
1   \usepackage{diffs}
```

1 FixMe-like notes

Sometimes you want to put some notes in the text to remind you what has to be fixed later. This is the aim of the command `\fixme`:

```
1   In this paper, the unification theory is proven \fixme{Proof to be checked and
        written.} and the meaning of life is experimentally found through stochastic
        methods. \fixme{Reformulate this sentence.} Furthermore, \dots
```

will produce:

> In this paper, the unification theory is proven [FIXME: Proof to be checked and written.] and the meaning of life is experimentally found through stochastic methods. [FIXME: Reformulate this sentence.] Furthermore, . . .

The FixMe notes can then be gathered and displayed in a table, using the `\listoffix` command:

```
1   \listoffix
```

will produce:

> Proof to be checked and written. 1
> Reformulate this sentence. 1

2   Managing document changes

When multiple persons write a paper together, it can rapidly turn to a tedious work to remember which changes have been made since the previous version of the paper, and who did what in the paper. I propose a set of very simple macros that allow for noticing in a clear way in the document the set of successive changes, with the names of the writers who are responsible of these changes.

What you have to do first is to register a set of writers, with their name, a name that will be displayed in the document, and a color for displaying their changes (the syntax for the colors is the one of the `color` package):

```
1  \declareuser{gabu}{Gabu}{blue}
2  \definecolor{myBeautifulColor}{rgb}{0.8,0.6,0.2}
3  \declareuser{zomeu}{Zomeu}{myBeautifulColor}
```

If you defined a user named *gabu*, you will be able to use three commands: `\addgabu`, `\removegabu` and `\changegabu`, respectively to add, remove, and change some text in the current version of the document. An example of the use of those commands (provided that you have registered the two previous users) follows:

```
1  In the following, we give a \changegabu{50 pages}{10 lines} proof of the Fermat's
       famous theorem, that is used\addzomeu{, with the help of a well-known lemma
       from the collective decision theory under uncertainties and possibilities,} to
        prove that the polynomial hierarchy collapses at the $42^{\text{th}}$ level.
       \removezomeu{From that result we prove that an artificial intelligence will
       defeat mankind in a go game tournament in year 3125.}
```

> In the following, we give a <Gabu> ~~50 pages~~ [replaced by] 10 lines <Gabu> proof of the Fermat's famous theorem, that is used <Zomeu> , with the help of a well-known lemma from the collective decision theory under uncertainties and possibilities, <Zomeu> to prove that the polynomial hierarchy collapses at the 42th level.   <Zomeu> ~~From that result we prove that an artificial intelligence will defeat mankind in a go game tournament in the year 3125.~~ <Zomeu>

3   Final version of a document

Once you are sure that the current version of the document will be the final one, you can produce the final version without the comments by using the `[final]` optional argument in the `\usepackage` command.

For example, with the `[final]` optional argument, the following code:

```
1  In this paper, the unification theory is proven \fixme{Proof to be checked and
       written.} and the meaning of life is experimentally found through stochastic
       methods. \fixme{Reformulate this sentence.} Furthermore, \dots
2
3  In the following, we give a \changegabu{50 pages}{10 lines} proof of the Fermat's
       famous theorem, that is used\addzomeu{, with the help of a well-known lemma
```

```
      from the collective decision theory under uncertainties and possibilities,} to
       prove that the polynomial hierarchy collapses at the $42^{\text{th}}$ level.
      \removezomeu{From that result we prove that an artificial intelligence will
      defeat mankind in a go game tournament in year 3125.}
```

will produce:

> In this paper, the unification theory is proven and the meaning of life is experimentally found through stochastic methods. Furthermore, ...
> In the following, we give a 10 lines proof of the Fermat's famous theorem, that is used, with the help of a well-known lemma from the collective decision theory under uncertainties and possibilities, to prove that the polynomial hierarchy collapses at the 42th level.

4   Aknowledgements