The (x)color Extension Package normalcolor Revision r11

Markus Kohm

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Abstract

Packages color and xcolor provide excellent features for managing and using colours. There is only one little feature sometimes missing: Setting up the default colour of \normalcolor. The only purpose of normalcolor is to extend both packages by exactly this single feature.

Contents

1 Loading normalcolor

You can load package normalcolor as you load all other packages, too:

```
\usepackage{normalcolor}
```

Note: It does not matter whether you load color[1] or xcolor[2] before or after normalcolor. Even using neither color nor xcolor would not blame normalcolor, but then it would be completely useless.

2 Setting up the Normal Colour

\setnormalcolor   This command has the same arguments like \color. See the documentation of either package color[1] or package xcolor[2] (depending on the one you are using)

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[1] http://ctan.org/pkg/color
[2] http://ctan.org/pkg/xcolor

for the syntax. But in opposite to `\color` it does not change the current colour but the colour of all implicit or explicit usages of `\normalcolor`.

If you use the command before `\begin{document}` it will also change the initial colour of the document.

`\resetnormalcolor`   This command, which has no argument, changes the colour of `\normalcolor` into the current colour. If you use it before `\begin{document}` it will be delayed until `\begin{document}` and therefore also changes the current colour at the start of the document. But after `\begin{document}` it will only change `\normalcolor` without changing the current colour.

3   Example

Try the following example and have a look at the page numbers in the table of contents and the page footer. All these, except the section page numbers in the table of contents, are printed using `\normalcolor`:

```
1 \listfiles
2 \documentclass{article}
3
4 \usepackage{normalcolor}
5 \setnormalcolor{green}
6 \usepackage{xcolor}
7
8 \usepackage{blindtext}
9 \begin{document}
10 \color{blue}
11 \tableofcontents
12 \blinddocument
13 \setnormalcolor{red}
14 \blinddocument
15
16 \resetnormalcolor
17 \blinddocument
18 \end{document}
```

4   Implementation

The package does not have any options. So we just call

```
19 \ProcessOptions\relax
```

`\resetnormalcolor`   This is the very simple first version of the command. Before `\begin{documet}` it simply delays itself until `\begin{document}`.

```
20 \DeclareRobustCommand*{\resetnormalcolor}{\AtBeginDocument{\resetnormalcolor}}
```

To make this work, we need to redefine it at `\begin{document}`:

```
21 \AtBeginDocument{%
22   \let\resetnormalcolor\relax
```

```
23 \DeclareRobustCommand*{\resetnormalcolor}{%
24   \ifdefined\default@color
25     \ifdefined\current@color
26       \let\default@color\current@color
27     \fi
28   \fi
29 }%
30 }
```

Note, that changing the default colour before loading either `color` or `xcolor` does not work, because these packages set `\default@color` themselves at `\begin{document}`. But indeed in this case it is much more simple, because we just have to set up the wanted colour.

```
31 \DeclareRobustCommand*{\setnormalcolor}{%
32   \@ifnextchar [%]
33     \@@setnormalcolor\@setnormalcolor
34 }
35 \newcommand*{\@@setnormalcolor}[2][]{%
36   \AtBeginDocument{%
37     \begingroup\expandafter\expandafter\expandafter\endgroup
38     \expandafter\ifx\csname color\endcsname\relax\else
39       \color[{#1}]{#2}\let\default@color\current@color
40     \fi
41   }%
42 }
43 \newcommand*{\@setnormalcolor}[1]{%
44   \AtBeginDocument{%
45     \begingroup\expandafter\expandafter\expandafter\endgroup
46     \expandafter\ifx\csname color\endcsname\relax\else
47       \color{#1}\let\default@color\current@color
48     \fi
49   }%
50 }
```

After `\begin{document}` we need another definition of `\@@setnormalcolor` and `\@setnormalcolor`. In this case we need to change `\default@color` without changing `\current@color`. This may be done using a trick.

```
51 \AtBeginDocument{%
52   \begingroup\expandafter\expandafter\expandafter\endgroup
53   \expandafter\ifx\csname color\endcsname\relax
54     \renewcommand*{\@@setnormalcolor}[2][]{}%
55     \let\@setnormalcolor\@gobble
56   \else
57     \renewcommand*{\@@setnormalcolor}[2][]{%
58       \begingroup
59         \color[{#1}]{#2}%
60         \edef\reserved@a{%
61           \noexpand\endgroup
62           \noexpand\def\noexpand\default@color{%
63             \unexpanded\expandafter{\current@color}%
```

```
64           }%
65         }%
66       \reserved@a
67     }%
68     \renewcommand*{\@setnormalcolor}[1]{%
69       \begingroup
70         \color{#1}%
71         \edef\reserved@a{%
72           \noexpand\endgroup
73           \noexpand\def\noexpand\default@color{%
74             \unexpanded\expandafter{\current@color}%
75           }%
76         }%
77       \reserved@a
78     }%
79   \fi
80 }
```

Change History

r0
    General: Start of project 1

r11
    General: First release 1

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Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.