

The fullminipage package*

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Abstract

This package provides the environment `fullminipage`, which generates a `minipage` spanning a new, complete page with page style `empty`. The environment provides options to set margins around the `minipage` and configure the background.

1 Usage

1.1 The Environment

`fullminipage` The environment `fullminipage` generates a new page with page style `empty`, which is spanned by a `minipage`. The available horizontal and vertical sizes are `\hsize` and `\vsize`, respectively.

Caveat: The clearing of the page before/after the `fullminipage` might not be done correctly in certain circumstances, in particular, multi-column documents. Please refer to the `pagebreak` option for details.

1.2 Options

The environment `fullminipage` has an optional argument, which accepts a comma-separated list of $\langle key \rangle = \langle value \rangle$ pairs:

<code>left</code>	left margin (default: 0 pt)
<code>right</code>	right margin (default: 0 pt)
<code>top</code>	top margin (default: 0 pt)
<code>bottom</code>	bottom margin (default: 0 pt). Note that content exceeding the vertical size of the minipage will not be “stopped” by the bottom margin. The value is rather used to calculate the vertical size of the minipage.
<code>alignment</code>	the vertical alignment inside the minipage (one of <code>tcb</code> ; default: <code>t</code>)
<code>bgcolor</code>	color of the background (except for the margins, empty by default). Omitting the $\langle value \rangle$ will lead to a black background. A blue background can, for example, be generated with <code>bgcolor=blue</code> .
<code>background</code>	arbitrary macro for the background (empty by default). This allows, for example, to put an image into the background with <code>background=\includegraphics{<file>}</code> . The image will be aligned in the lower left corner of the minipage. Note that <code>background</code> is put on top of the background color defined by <code>bgcolor</code> .
<code>pagebreak</code>	macro for clearing page before and after inserting the <code>fullminipage</code> . By default, <code>\newpage</code> will be used in single-column documents and <code>\clearpage</code> , if a multi-column style is detected. This detection, however, might fail and the user might want to explicitly set <code>pagebreak=\clearpage</code> . Note that <code>\clearpage</code> has the side-effect of flushing all pending floats.

2 License

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3 Bugs, problems, and suggestions

Please report bugs and problems or send suggestions for this package to Christian Schneider.

4 Implementation

The implementation is briefly described in this section. First of all, we need the keyval package for $\langle key \rangle = \langle value \rangle$ options. The color package will only be required, if the background color needs to be defined.

```
1 \RequirePackage{keyval}
2 \RequirePackage{color}
```

Next, the $\langle key \rangle$ s are defined:

```
3 \define@key{fullminipage}{left}{\def\fullminipage@left{#1}}
4 \define@key{fullminipage}{right}{\def\fullminipage@right{#1}}
5 \define@key{fullminipage}{top}{\def\fullminipage@top{#1}}
6 \define@key{fullminipage}{bottom}{\def\fullminipage@bottom{#1}}
7 \define@key{fullminipage}{alignment}{\def\fullminipage@alignment{#1}}
8 \define@key{fullminipage}{bgcolor}[black]{\def\fullminipage@bgcolor{#1}}
9 \define@key{fullminipage}{background}{\def\fullminipage@background{#1}}
10 \define@key{fullminipage}{pagebreak}{\def\fullminipage@pagebreak{#1}}
```

Finally, the environment is defined:

```
11 \newenvironment{fullminipage}[1][{}]{%
12   \begin{group}
```

The $\langle key \rangle = \langle value \rangle$ pairs are evaluated and a simple detection for two-column layout is performed.

```
13   \setkeys{fullminipage}{left=\z@,right=\z@,top=\z@,bottom=\z@,%
14                               alignment=t,background={},pagebreak=\newpage}%
15   \@ifundefined{twocolumn@sw}{}%
16     {\twocolumn@sw{\setkeys{fullminipage}{pagebreak=\clearpage}}{}}%
17   \if@twocolumn\setkeys{fullminipage}{pagebreak=\clearpage}\fi%
18   \setkeys{fullminipage}{#1}%
```

A new page is started with pagestyle empty.

```
19   \fullminipage@pagebreak
20   \thispagestyle{empty}%
```

The top position is calculated and the top (vertical) position adjusted with `\vspace*`.

```

21 \tempdima=-1in
22 \advance\tempdima by-\voffset
23 \advance\tempdima by-\topmargin
24 \advance\tempdima by-\headheight
25 \advance\tempdima by-\headsep
26 \tempdimb=\tempdima
27 \advance\tempdima by-\parskip
28 \advance\tempdima by-\topskip
29 \advance\tempdima by\fullminipage@top
30 \vspace*{\tempdima}%

```

The bottom position is calculated and the current page size enlarged accordingly with `\enlargethispage`.

```

31 \tempdima=\paperheight
32 \advance\tempdima by\tempdimb
33 \advance\tempdima by-\textheight
34 \advance\tempdima by-\fullminipage@bottom
35 \enlargethispage{\tempdima}%

```

The position corresponding to the left margin is calculated.

```

36 \leftmargin=-1in
37 \advance\leftmargin by-\hoffset
38 \if@twoside
39   \ifodd\value{page}%
40     \advance\leftmargin by-\oddsidemargin
41   \else
42     \advance\leftmargin by-\evensidemargin
43   \fi
44 \else
45   \advance\leftmargin by-\oddsidemargin
46 \fi
47 \advance\leftmargin by\fullminipage@left

```

The length of a line is calculated and the margins are set with `\parshape`.

```

48 \linewidth=\paperwidth
49 \advance\linewidth by-\fullminipage@left
50 \advance\linewidth by-\fullminipage@right
51 \parshape \@ne \leftmargin \linewidth

```

Prepare output without extra spaces.

```

52 \nointerlineskip
53 \noindent

```

The value of `\vsize` is calculated and set. (If it is set before the `\noindent` above, it will be overwritten in some cases.)

```

54 \vsize=\paperheight
55 \advance\vsize by-\fullminipage@top
56 \advance\vsize by-\fullminipage@bottom

```

A zero-sized `picture` environment containing the background is output and the `minipage` is started.

```

57 \begin{picture}(0,0)
58   \@ifundefined{fullminipage@bgcolor}{\color{black}}{}%
59   \put(0,0){\makebox(0,0)[bl]{%

```

```

60         {\color{\fullminipage@bgcolor}{\rule{\linewidth}{\vsize}}}%
61     }%
62 }%
63 \put(0,0){\makebox(0,0)[bl]%
64     {\fullminipage@background}%
65 }%
66 \end{picture}%
67 \begin{minipage}[b][\vsize][\fullminipage@alignment]{\linewidth}
68 }%

```

The minipage is closed and a new page is started.

```

69 {%
70     \end{minipage}%
71     \parfillskip=\z@
72     \fullminipage@pagebreak
73 \endgroup
74 }

```

Change History

v0.1.0

General: initial public version 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.

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