The `hackthefootline` package

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2018/01/16

Dedicated to all the LaTeX beamer users …

*…who load two different themes in the same presentation
or redefine commands to obtain the desired footline …*

…and the other guys just using `\setbeamertemplate`

Abstract

Arbitrary footline selection and configuration for LaTeX beamer's standard themes.
`hackthefootline` is a package taking over, defining and redefining different footlines, so they can be configured using key-value syntax.

Contents

Dependencies and other requirements

beamer   Since `hackthefootline` is designed to modify `beamer`'s footlines, it is incompatible to any other document class. Therefore, load this package only in `beamer` documents!

pgfkeys   `hackthefootline` heavily depends on the `pgfkeys` package for handling the whole key-value stuff.

Also, additional sophisticated features require the following packages:

appendixnumber-beamer   The `appendixnumberbeamer` package implements a simple solution for appendix frames not being calculated into the total number of frames

etoolbox   Provides access on ε-TeX primitives

calc   Required for basic calculations

numprint   Prints out numbers, counters and lengths

However, the four latter dependencies can be removed by using some package options. See section 2.2 for further details.

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This work has the LPPL maintenace status 'maintained'. The current maintainer of this work is Sebastian Friedl.
This work consists of the following files:

- `hackthefootline.sty`
- `hackthefootline-examples.tex` and
- `hackthefootline-doc.tex`

Acknowledgement

The basic layout of the two– and three–column footline is based on the original LaTeX beamer split and infolines outer themes written by Till Tantau.

Notice: Behavior inside the presentation's appendix

By default, this package *does not count appendix frames* into the total number of frames and resets the counter for frame numbers to 1 as soon as the `\appendix` command is used. Also, frame numbers won't be displayed on footlines inside the appendix.

This behavior can be suppressed by passing the `countappendixframes` option.

1 Using the package

The `\usepackage[<Options>]{hackthefootline}` command loads the package[1]. A list of all available options can be found in section 2.

Important note: You *have* to pass the *footline's number of columns* as an option to the package (available: `onecol`, `twocols` or `threecols`). If you don't do so, the footline gets removed completely.
See section 5.1 for some examples.

2 Package options

2.1 Options influencing the footline's configuration

These options determine the number of columns being used for the footline.
You *have* to pass one of these options when loading `hackthefootline`; otherwise the footline will be removed completely.

onecol   The "initial footline hack" produces a one–column footline

twocols   The "initial footline hack" produces a two–column footline

threecols   The "initial footline hack" produces a three–column footline

2.2 Options influencing the package's behavior

These options can be passed to disable additional features and remove dependencies on other packages.

countappendix-
frames   If the `countappendixframes` option is passed to the package, appendix frames are counted into the total number of frames.
Removes the following dependencies: `appendixnumberbeamer`, `etoolbox`

nofun   Doesn't support frame numbers being shown as "percent of presentation"
Removes the following dependencies: `calc`, `numprint`

3 Configuring the footline

The internal mechanisms of `hackthefootline` are using templates for displaying the provided information. Each template is available in different styles, which can be switched using the provided key value syntax:

\htfconfig   Use `\htfconfig{key1=value1, key2=value2, …}` to modify the current configuration of the footline. Changes apply instantly.
See section 5.2 for examples.

All available keys and values are listed below being depicted as follows:

key   ***possible values*** . . . .

Description of the values' effects

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[1]To do so, the package has to be installed in a location where LaTeX is able to find it

Annotations:

- The default values of the keys depend on the number of columns chosen when loading the package. See section 4 for further details.

- *Templates not visible* in the default configuration have been hidden by setting the value of the according key to `none`. Apply another value to this key and the template will show up.
  Templates visible in the default configuration can be hidden by setting the value of the according key to `none` (there's only one exception: `atsep`).
  See section 5.2 for examples.

`cols`   ***one, two, three, none*** . . . .

The number of colums used for the footline:

one Use a footline consisting of a single column

two Use a footline consisting of two columns

three Use a footline consisting of three columns

none Remove the footline completely

This key is provided although it is *not* recommended to change its value within a document. When initializing `hackthefootline` using a column option and switching to the `none` style, there will be a whitespace "reserved" for the footline left.
The other way round, when initializing `hackthefootline` without a column option and switching to a footline, the footline will be cut off at half of its height.

`title`   ***short, long, none*** . . . .

Sets the title type displayed in the footline:

short Show the short title given in the square braces of the `\title` command.
      When no short title is given, the long title will be used.

long Show the long title given in the curly braces of the `\title` command.

none Don't show any title inside the footline

`authinst`   ***onlyauthor, onlyinst, instpths, authpths, both, none*** . . . .

Influences the way author and institute are displayed:

onlyauthor Show only the author's name

onlyinst Show only the institute's name

instpths Show both, author and institute, but put the institute into parentheses

authpths Show both, author and institute, but put the author into parentheses

both Show both and separate them using a comma

none Show neither author, nor institute

All templates use the values specified for short author / short institute.

`date` ***short, long, none*** . . . .

The date displayed in the footline:

short Show the short date

long Show the long date

none Do not show any date

`framenrs` ***counter, fraction, percent, none*** . . . .

Controls the type of frame number shown in the footline:

counter Only show the number of the current frame

fraction Show the number of the current frame as well as the total number of frames

percent Display the current progress of the presentation displayed as a percent value
When setting this value, make sure that you didn't pass the `nofun` option when loading the package, otherwise an error message will be thrown.

none Do not show frame numbers

`atsep` ***colon, comma, space*** . . . .

Sets the character used to separate author and title when using the `onecol` footline:

colon Use a colon as separator

comma Use a comma as separator

space Use a space as separator

4   Default configurations

Depending on the selected number of columns, the default configuration of the footlines is as follows:

One–column footline

```
\htfconfig{%
    title=short, authinst=both,
    date=none, framenrs=fraction, atsep=colon}
```

Short author, Short institute: Short title	1 / 1

Two–column footline

```
\htfconfig{%
    title=short, authinst=onlyauthor,
    date=none, framenrs=none}
```

Short author	Short title

Three-column footline

```
\htfconfig{%
    title=short, authinst=instpths,
    date=short, framenrs=fraction}
```

Short author (Short institute)	Short title	Short date	1 / 1

5   Examples

5.1   Setting up `hackthefootline`

Example 1:   `\usepackage[onecol]{hackthefootline}`
Effect: A one-column footline

Short author, Short institute: Short title	1 / 1

Example 2:   `\usepackage[twocols]{hackthefootline}`
Effect: A two-column footline

Short author	Short title

Example 3:   `\usepackage[threecols]{hackthefootline}`
Effect: A three-column footline

Short author (Short institute)	Short title	Short date	1 / 1

Example 4:   `\usepackage{hackthefootline}`
Effect: The footline gets removed

5.2   Switching templates

This section assumes, that the `\usepackage[twocols]{hackthefootline}` command was used to load the `hackthefootline` package.

The preamble contains the following commands for setting the information about title, author, institute and date:

```
\title[Short Introduction]{%
    A short introduction on \texttt{hackthefootline}'s facilities}
\author[S. Friedl]{Sebastian Friedl}
\institute[Some Institute]{Some Institute far, far away}
\date[2018/01/15]{January 15, 2018}
```

We will start with step 1 and continue further on, each step is changing the result of the last one.

Initial style:

S. Friedl	Short Introduction

Step 1: Show fraction frame numbers
Command: \htfconfig{framenrs=fraction}
Effect:

	S. Friedl	Short Introduction	1 / 1

Step 2: Show the short version of the date
Command: \htfconfig{date=short}
Effect:

2018/01/15	S. Friedl	Short Introduction	1 / 1

Step 3: In addition to the author, show the insitute in parentheses
Command: \htfconfig{authinst=instpths}
Effect:

2018/01/15	S. Friedl (Some Institute)	Short Introduction	1 / 1

Step 4: Show the long, full title
Command: \htfconfig{title=long}
Effect:

2018/01/15	S. Friedl (Some Institute)	A short introduction on hackthefootline's facilities	1 / 1

Step 5: The right column is too full now. Remove the frame numbers
Command: \htfconfig{framenrs=none}
Effect:

2018/01/15	S. Friedl (Some Institute)	A short introduction on hackthefootline's facilities

Step 6: Switch to a one-column footline and remove the date
Command: \htfconfig{cols=one, date=none}
Effect:

S. Friedl (Some Institute): A short introduction on hackthefootline's facilities

Step 7: Remove the footline
Command: \htfconfig{cols=none}
Effect: No footline will be shown (but a space above the frame's bottom …)