Demo of flatbox

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Dependencies:

- \bullet xcolor
- tcolorbox
- \bullet ifthen
- applecolors (optional)

1 Presentation

The package flabox provides three kind of tcolorboxes:

- flatbox: boxes without background
- ffbox: boxes with filled background
- groupbox: another kind of minimalistic box

Title

I'm a flatbox.

Title

 $I^{\prime}m$ a ffbox.

Title -

 $I^{\prime}m$ a groupbox.


```
begin{flatbox}{Title}
I'm a \texttt{flatbox}.
hend{flatbox}

begin{ffbox}{Title}
I'm a \texttt{ffbox}.
hend{ffbox}

begin{groupbox}{Title}
I'm a \texttt{groupbox}.
hend{groupbox}.
```

These boxes can have an empty title:

I'm a flatbox without title.

I'm a ffbox without title.

I'm a groupbox.


```
begin{flatbox}{}

I'm a \texttt{flatbox} without title.
hend{flatbox}

begin{ffbox}{}

I'm a \texttt{ffbox} without title.
hend{ffbox}

begin{groupbox}{}

I'm a \texttt{groupbox}.

hend{groupbox}
```

1.1 Colors

Since these boxes are intentionally simplistic, the main point one wants to customize is the colors. To define flatbox-compatible colors, use \setflatboxcolor.


```
\setflatboxcolor[fg]{hippie}{red} % same as \setflatboxcolor{hippie}{red}
\setflatboxcolor[bg]{hippie}{green}
```

For flatboxes, the background color is useless and it is not even necessary to define it.

Then, to use this color combination, pass the name of the combination as an optional parameter to the boxes:


```
begin{flatbox}[hippie]{Hippie flatbox}
I'm a hippie box.
hend{flatbox}

begin{ffbox}[hippie]{Hippie flatbox}
I'm a hippie box.
hend{ffbox}
```

Hippie flatbox

I'm a hippie box.

Hippie flatbox

I'm a hippie box.

Alternatively, you can manually define the colors using the **xcolor** package facilities:

- \colorlet{flatboxhippie.fg}{red}
- definecolor{flatboxhippie.bg}{RGB}{0,255,0}

The flatbox package defines some default colors for the environments flatbox, exampleflatbox, alertflatbox, noteflatbox, theoremflatbox, ffbox, exampleffbox, alertffbox, noteffbox and theoremffbox which are shown in section 2.

You can also override default colors, which names are:

- flatbox.fg and flatbox.bg
- flatboxexample.fg and flatboxexample.bg
- flatboxalert.fg and flatboxalert.bg
- flatboxtheorem.fg and flatboxtheorem.bg
- flatboxnote.fg and flatboxnote.bg

If the package applecolors is imported before flatbox, the iOS colors are used as default colors instead.

1.2 Error boxes

This package also defines the command \errbox and the environment errorbox that uses the colors flatboxerror.fg and flatboxerror.bg. They're sometimes useful to the writter for debugging purposes or to leave temporary notes but clearly not meant to be kept in the final document.

I'm a sentance oh crap! with some mistackes not again!

Fix spelling (aspell?).

- 1 I'm a sentance\errbox{oh crap!} with some mistackes\errbox{not again!}.
- 3 \begin{errorbox}
- Fix spelling (aspell?).
- 5 \end{errorbox}

1.3 Package options

The package flatbox accepts two options:

- rounded: gives ffboxes rounded corners
- align: if you wish to use both flatboxes and ffboxes in the same document, you might want to have their left magin aligned. This option does that (flatboxes have more indentation otherwise).

This option is used in this document.

2 Demo

Each box just has one (required) parameter: the title (can be empty).

 $\LaTeX code$:

\begin{style of flatbox}{optional title}

2.1 flatbox and ffbox

Demo of flatbox

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

Demo of groupbox

I'm a demo box. Also I like to span over multiple lines.

Demo of ffbox

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

2.2 exampleflatbox and exampleffbox

Demo of exampleflatbox

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

Demo of exampleffbox

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

Demo of examplegroupbox

I'm a demo box. Also I like to span over multiple lines. I'm a demo box. Also I like to span over multiple lines.

2.3 alertflatbox and alertffbox

Demo of alertflatbox

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

Demo of alertgroupbox ·

I'm a demo box. Also I like to span over multiple lines.

Demo of alertffbox

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

I'm a demo box. Also I like to span over multiple lines.

2.4 theoremflatbox and theoremffbox

Demo of theoremflatbox

Stirling's approximation

$$\forall n \in \mathbb{N}, n! \sim \sqrt{2 \cdot \pi \cdot n} \cdot \left(\frac{n}{e}\right)^n$$

Stirling's approximation

$$\forall n \in \mathbb{N}, n! \sim \sqrt{2 \cdot \pi \cdot n} \cdot \left(\frac{n}{e}\right)^n$$

Demo of theoremffbox

Stirling's approximation

$$\forall n \in \mathbb{N}, n! \sim \sqrt{2 \cdot \pi \cdot n} \cdot \left(\frac{n}{e}\right)^n$$

Stirling's approximation

$$\forall n \in \mathbb{N}, n! \sim \sqrt{2 \cdot \pi \cdot n} \cdot \left(\frac{n}{e}\right)^n$$

Demo of theoremgroupbox

Stirling's approximation

$$\forall n \in \mathbb{N}, n! \sim \sqrt{2 \cdot \pi \cdot n} \cdot \left(\frac{n}{e}\right)^n$$

Stirling's approximation

$$\forall n \in \mathbb{N}, n! \sim \sqrt{2 \cdot \pi \cdot n} \cdot \left(\frac{n}{e}\right)^n$$

2.5 noteflatbox and noteffbox

Demo of noteflatbox

I'm a demo box. Also I like to span over multiple lines.

Demo of noteffbox

I'm a demo box. Also I like to span over multiple lines. I'm a demo box. Also I like to span over multiple lines. I'm a demo box. Also I like to span over multiple lines.

Demo of notegroupbox -

I'm a demo box. Also I like to span over multiple lines. I'm a demo box. Also I like to span over multiple lines.