progressbar

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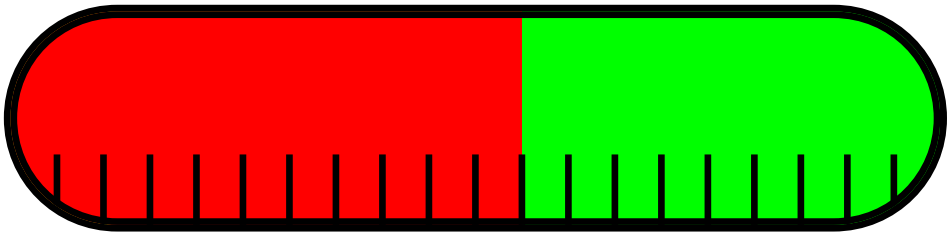
Abstract

This package allows you to easily visualize shares of total amounts in the form of a bar. So basically you can convert a number like 0.735 to  using the command `\progressbar{0.735}`.

Of course also a lot of customizations are possible (like this: ).



```
\progressbar[width=textwidth, heighta=3cm, filledcolor=
    red, emptycolor=green, borderwidth=5pt, tickswidth
    =2.5pt, roundnessr=0.5, subdivisions=20]{0.55}
```

Contents

1 Installation

Make sure the file `progressbar.sty` is placed somewhere, where LaTeXcan find it. Usually that means, you simply download the package `progressbar` with the LaTeX-package-manager of your choice.

1.1 Dependencies

You also have to ensure that all packages needed by `progressbar` are present (some package-managers do this for you). The dependencies are:

- calc
- kvsetkeys
- kvoptions
- tikz

2 How to use `progressbar`

`\usepackage{progressbar}`
`\usepackage[]{progressbar}`

Like any other package, to use `progressbar`, you have to load it first. You do this with

```
\usepackage{progressbar}
```

or

```
\usepackage[<options>]{progressbar}
```

(You can find an explanation of all options in the section 3.)

Once you have loaded `progressbar`, you can use two different commands, described in the following.

2.1 `\progressbar`

`\progressbar{}`
`\progressbar[]{}`

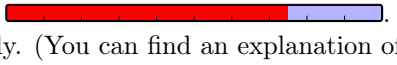
The command

```
\progressbar{<number>}
```

will draw you a progressbar with the share `<number>`. For example `\progressbar{0.666}` gives you this  . You would want to use only numbers in the interval $[0, 1]$, although other numbers are also possible (but will look just the same as `\progressbar{0}` or `\progressbar{1}`).

If you want one specific progressbar to look different than the others, use

```
\progressbar[<options>]{<number>}
```

instead. This command is just the same as `\progressbar{<number>}` but allows you to manipulate the appearance of the current progressbar. So `\progressbar[width=5cm,heightr=1,filledcolor=red,emptycolor=blue!30]{0.75}` would look like this:  . In this case the options are only changed locally. (You can find an explanation of all options in the section 3.)

2.2 \progressbarchange

\progressbarchange{} In principle, the command \progressbar{<number>} uses the options specified with \usepackage[<options>]{progressbar} or the default options (if an option was not specified). As described in the previous section (2.1), you can override these options with \progressbar[<options>]{<number>}. However, if you want to change the settings for *all* following progressbar, you can use the command

```
\progressbarchange{<options>}
```

So basically

```
\progressbar{0.3}\\
\progressbar[roundnessr=0.5,ticksheight=1,tickswidth=1.5pt
    ]{0.4}\\
\progressbar[roundnessr=0.5,ticksheight=1,tickswidth=1.5pt
    ]{0.5}\\
\progressbar[roundnessr=0.5,ticksheight=1,tickswidth=1.5pt
    ]{0.6}
```

gives you the same as

```
\progressbar{0.3}\\
\progressbarchange{roundnessr=0.5,ticksheight=1,tickswidth=1.5
    pt}
\progressbar{0.4}\\
\progressbar{0.5}\\
\progressbar{0.6}
```

However, keep in mind that in the second case the options are changed globally. Therefore, all following progressbars will keep the changed design (as long as you don't call \progressbarchange{<options>} with other options again). (You can find an explanation of all options in the section 3.)

3 Options

3.1 Global and local options

You can set global options when you load the progressbar with \usepackage [options]{progressbar} and with the command \progressbarchange{<options>}. These options affect all following calls of the commands \progressbar{<number>} and \progressbar[<options>]{<number>}.

However, you can override global options with local options specified with \ progressbar[<options>]{<number>}.

3.2 Options, their defaults and how to change them

All listed options can be used globally and locally.

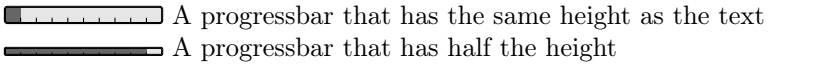
You will notice that some of the options are available with the prefix r (standing for relative) aswell as with the prefix a (standing for absolute). I would recommend

you to always use those options with the prefix `r`, as using absolute values might not interact too well with the rest of your documents settings. But as long as you know what you are doing, it's up to you.

`heightr` default=`1`

The progressbars height as a fraction of the textheight[1].

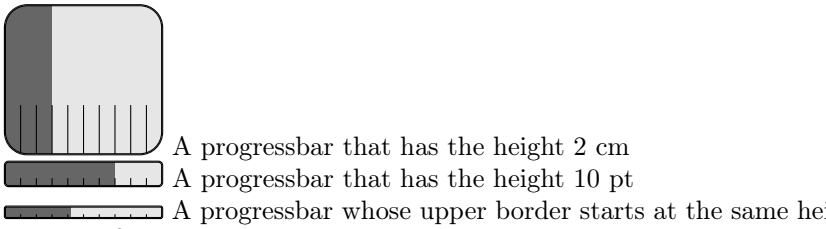
```
\progressbar[heightr=1]{0.1}A progressbar that has the same
    height as the text\\
\progressbar[heightr=0.5]{0.9}A progressbar that has half the
    height
```


A progressbar that has the same height as the text
A progressbar that has half the height

`heighta` default=`unused`

With this option you can define the progressbars height absolutely.

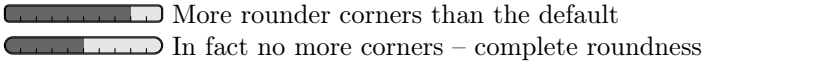
```
\progressbar[heighta=2cm]{0.3} A progressbar that has the
    height 2~cm\\
\progressbar[heighta=10pt]{0.7} A progressbar that has the
    height 10~pt\\
\progressbar[heighta=\heightof{a} + 0.8pt]{0.42} A progressbar
     whose upper border starts at the same height as the letter
     "a"
```


A progressbar that has the height 2 cm
A progressbar that has the height 10 pt
A progressbar whose upper border starts at the same height as the letter "a"[2]

`roundnessr` default=`0.15`

`progressbar` allows rounded corners. With this option you can set them as a fraction of the progressbars height. You would not want to use numbers higher than 0.5.

```
\progressbar[roundnessr=0.25]{0.8} More rounder corners than
    the default\\
\progressbar[roundnessr=0.5]{0.5} In fact no more corners --
    complete roundness
```


More rounder corners than the default
In fact no more corners – complete roundness

`roundnessa` default=`unused`

You can also define the corners radius as absolute values.

```
\progressbar[roundnessa=2pt]{0} Rounded corners radius 2~pt\\
\progressbar[roundnessa=0cm]{1} No rounded corners
```

[1] I used the capital letter "I" as a reference for the textheight

[2] The `\heightof` command and the possibility of adding is provided by the package `calc`

 Rounded corners radius 2 pt

 No rounded corners

`width` default=`6em`

The width of the progressbar.

```
\progressbar[width=5cm]{0.123} Width: 5~cm\\
\progressbar[width=20em]{0.785} Width: 20~em
```

 Width: 5 cm

 Width: 20 em

`borderwidth` default=`0.8pt`

The linewidth of the progressbars border.

```
\progressbar[borderwidth=2pt]{0.6} Borderwidth: 2~pt\\
\progressbar[borderwidth=0.025em]{0.3} Borderwidth: 0.025~em
```

 Borderwidth: 2 pt

 Borderwidth: 0.025 em

`subdivisions` default=`10`

As you may have noticed, (by default) the progressbar also has ticks. Those ticks splits the progressbar in multiple subdivisions. You can define the number of subdivisions with `subdivisions=<number>`. Therefore the number of ticks is `<number>` − 1.

```
\progressbar[subdivisions=3]{0.666667} 3 subdivisions and 2
    ticks\\
\progressbar[subdivisions=15]{0.466667} 15 subdivisions and 14
     ticks
```

 3 subdivisions and 2 ticks

 15 subdivisions and 14 ticks

`tickswidth` default=`0.4pt`

The linewidth of the ticks.

```
\progressbar[tickswidth=1mm]{0.55} Tickswidth: 1~mm\\
\progressbar[tickswidth=0.1pt]{0.4} Tickswidth: 0.1~pt
```

 Tickswidth: 1 mm

 Tickswidth: 0.1 pt

`ticksheight` default=`0.33`

The height of the ticks as a fraction of the total progressbars height.

```
\progressbar[ticksheight=0.1]{0.22} Ticksheight: 10 ~\% of the
     total height\\
\progressbar[ticksheight=1]{0.88} Ticks are end-to-end
```

 Ticksheight: 10 % of the total height

 Ticks are end-to-end

`linecolor` default=`black`

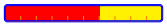
`tickscolor` default=`black`

`emptycolor` default=`black!10`

`filledcolor` default=`black!60`

These options should be self-explaining. Just use `xcolor`-color-definitions (use color names or the syntax `<color-name>!<number between 0 and 100>`) for brighter colors).

```
\progressbar[linecolor=blue,tickscolor=orange,emptycolor=
    yellow,filledcolor=red]{0.6}
```



4 Acknoledgment

A big shoutout to the pros from `http://www.mrunix.de/` (it's german). They helped me a lot and made `progressbar` possible.

5 Contact

If you have any question concerning `progressbar` or if you miss a feature, please write me a mail: `mails4me@gmx.at`.