progressbar

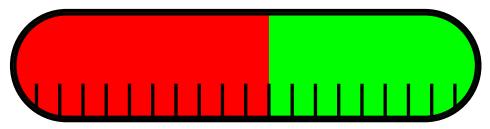
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Abstract

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}

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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>}

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

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 \mathbf{r} (standing for relative) as well as with the prefix \mathbf{a} (standing for absolute). I would recommend you to always use those options with the prefix \mathbf{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 textheight¹.

\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

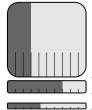
default=unused

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\\

 $\label{lem:continuous} $$ \operatorname{progressbar} [\operatorname{heighta} = \operatorname{heightof} \{a\} + 0.8pt] \{0.42\} \ A \ \operatorname{progressbar} $$ 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.

 $\label{lem:corners} $$ \operatorname{progressbar}[\operatorname{roundnessr=0.25}]{0.8} $$ More rounder corners than the default \$$ $$$

 $\label{lem:condition} $$ \operatorname{progressbar}[\operatorname{roundnessr=0.5}]{0.5}$ In fact no more corners --complete roundness $$$

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

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

```
More rounder corners than the default
             In fact no more corners – complete roundness
               default=unused
 roundnessa
            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
            Rounded corners radius 2 pt
            No rounded corners
               default=6em
      width
            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.
            \verb|\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
            \progressbar[subdivisions=15]{0.466667} 15 subdivisions and 14
             3 subdivisions and 2 ticks
            15 subdivisions and 14 ticks
               default=0.4pt
 tickswidth
            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
               default=0.33
ticksheight
            The height of the ticks as a fraction of the total progressbars height.
            \progressbar[ticksheight=0.1]\{0.22\} Ticksheight: 10 ^{\sim}\% 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 Changelog

2013/01/06 v.1.0b~3 replaced \progressbar@LoadFile@IfExist with \RequirePackage

 $2012/02/18 \ v.1.0b^2$ added version control for kvoptions $2010/10/02 \ v1.0b$ first release - all basic functionality

5 Acknoledgment

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

I also want to thank Robin Schneider (https://ypid.wordpress.com/) and Heiko Oberdiek who called my attention to the problems with \progressbar@LoadFile@IfExist.

6 Contact

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