

The thmlist Package

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Abstract

This is the document for the thmlist package, which provides a simple way for adding theorem environments quickly.

1 The purpose of this package

This package provides a simple way for adding theorem environments quickly. Welcome to feedback bugs or ideas via email xiamyphys@gmail.com or [GitHub](#).

This package has required the amsthm and mdframed packages to create different style of theorem environments, pgffor to support \foreach loop and listofitems to support list reading.

2 Loading thmlist

I strongly advise you to use terminal/cmd to implement the commands to update all the packages (and install this package) to the latest version or switch to portable version instead

```
sudo tlmgr update --self --all
```

3 Key values of this package

```
\usepackage[amscounter=<counter>,amsstyle=<style>,  
mdfcounter=<counter>,mdfstyle=<style>]{thmlist}
```

This package has four keys: amscounter, amsstyle, mdfcounter, mdfstyle.

The amscounter and the mdfcounter keys can set the ‘numberwithin’ of the theorem environments with(out) the frame style respectively, and the amsstyle and the mdfstyle keys can set the style of the theorem environments with(out) the frame style respectively.

If you have not set the keys, the default values of the four keys will be applied

```
amscounter=section,amsstyle=definition,mdfcounter=section,mdfstyle={}
```

<https://github.com/xiamyphys/thmlist>

4 Create theorem environments with(out) the framed style

- The `mdflist` command can create a series of theorem environments with the frame.
- The `amslist` command can create a series of theorem environments without the frame.

```
\amslist{remark,    example;    DarkRed,    Teal}
\mdflist{theorem,   lemma,      definition;
          DarkGreen, MidnightBlue, MidnightBlue}
```

The first line in the list is the name of the environments and the second line in the list is corresponding to color of the title and (or) frame of the environments. The following is the effect of the style configuration

```
\mdfdefinestyle{mdflist}{%
  skipabove=0pt,      skipbelow=0pt,
  hidealllines=true,  leftline=true,
  linewidth=.5ex,     innerleftmargin=1.5ex,
  innerrightmargin=0pt, innertopmargin=-1.5ex,
  innerbottommargin=.5ex}
\def\theexample{\arabic{example}} \let\theremark=\relax
```

You should put the counter configuration of some environments after `\begin{document}`, or they will not work. Such as

```
\def\theexample{\arabic{example}} \let\theremark=\relax
```

Definition 4.1 (The Definition Environment).

Lemma 4.1 (The Lemma Environment).

Theorem 4.1 (The Theorem Environment).

Example 1. This is an example.

Remark . This package works fine with the Standard Document Classes.