

The `marmertext` package

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Abstract

”Mermaid is a Javascript based diagramming and charting tool that uses Markdown-inspired text definitions and a renderer to create and modify complex diagrams.”

There was no implementation for using mermaid files in latex yet. So I decide to try it with this package.

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1 Preconditions

1. Install mermaid.cli (higher than 8.13.10)
`http://github.com/mermaid-js/mermaid-cli#Install-globally`
For instance with: `npm install -g @mermaid-js/mermaid-cli`
2. pdfflatex available with command line parameter: `--shell-escape`.

2 Usage

```
\documentclass[]{article}
\usepackage{marmermaidtex}
\begin{document}
\begin{marmermaidtex}[width=.25\textwidth]{foo1.pdf}
graph TD
  A[Christmas] -->|Get money| B(Go shopping)
  B --> C{Let me think}
  C -->|One| D[Laptop]
  C -->|Two| E[iPhone]
  C -->|Three| F[fa:fa]
\end{marmermaidtex}
\end{document}
```

2.1 Calling the Package

The package may be called as any other package with:

```
\usepackage{marmermaidtex}
```

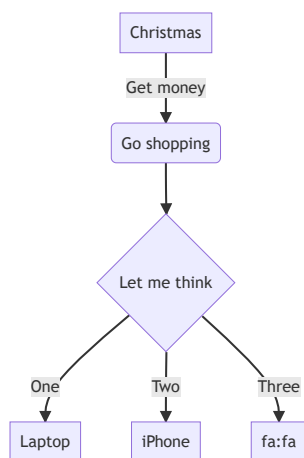
or you call it with setting the option(s). Take a look in subsection: 2.3

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

2.2 Commands / environments

marmermaidtex

```
\begin{marmermaidtex}[width=.25\textwidth]{foo1.pdf}
graph TD
  A[Christmas] -->|Get money| B(Go shopping)
  B --> C{Let me think}
  C -->|One| D[Laptop]
  C -->|Two| E[iPhone]
  C -->|Three| F[fa:fa]
\end{marmermaidtex}
```



Marmermaidtex environment in combination with figure environment:

```
\begin{figure}
\center
\begin{marmermaidtex}[width=.25\textwidth]{foo2.pdf}
graph TD
  A --> B
  B --> C
  C --> A
\end{marmermaidtex}
\caption{caption}
\label{fig:caption}
\end{figure}
```

2.3 Package options

Here are the options that may be loaded with the package:

- `noOverwrite` As default, the marmermaidtex environment will overwrite the existing files. With `noOverwrite` no overwriting will happen.
- `noWarningOverwrite` As default, the marmermaidtex environment will send a warning message for each file which is overwritten. With `noWarningOverwrite` only one warning message will be sent: "All warnings for overwrite files a switch off now."

3 Implementation

```
1 \RequirePackage{
2 ifthen,
3 xkeyval,
4 silence,
5 iftex,
6 ifpdf,
7 graphicx
8 }
```

define a new boolean called `noOverwrite` and set it to false

```
9 \newboolean{noOverwrite}
10 \setboolean{noOverwrite}{false}
```

define a new boolean called `noWarningOverwrite` and set it to false

```
11 \newboolean{noWarningOverwrite}
12 \setboolean{noWarningOverwrite}{false}
```

declare a new package option called `noOverwrite`

```
13 \DeclareOptionX{noOverwrite}{
14 \setboolean{noOverwrite}{true}
15 }
```

declare a new package option called `noWarningOverwrite`

```
16 \DeclareOptionX{noWarningOverwrite}{
17 \setboolean{noWarningOverwrite}{true}
18 }
```

```
19 \ProcessOptionsX
```

```
20 \ifthenelse{\NOT\boolean{noOverwrite} \AND \boolean{noWarningOverwrite}}{
21 \PackageWarning{marmermaidtex}{All Warnings for overwrite files a switch off now.}{}
}
```

```

22 \WarningFilter{latex}{Writing or overwriting file}
23 }

define a new boolean called noWarningOverwrite and set it to false
24 \newboolean{correctTool}
25 \setboolean{correctTool}{false}

26 \ifXeTeX
27 \setboolean{correctTool}{true}
28 \fi
29 \ifpdf
30 \setboolean{correctTool}{true}
31 \fi

32 \ifthenelse{\boolean{correctTool}}{\}\PackageError{marmermaidtex}{You aren't using pdflatex, }
marmermaidtex Definition for a new environment and call it marmermaidtex.
33 \newenvironment{marmermaidtex}[2] []{
Before:
define a new variable for keys for
34 \def\@graphicsopts{#1}
define a new variable for parameter for file name
35 \def\tempFilenameMermaidPdf{#2}
to save code to file
36 \csname filecontents*\endcsname[overwrite]{\tempFilenameMermaidPdf.tmp}
37 }
38 {
After:
39 \csname endfilecontents*\endcsname
include generated image to tex file
40 \expandafter\includegraphics\expandafter[\@graphicsopts]{\tempFilenameMermaidPdf}
41 }

```

Change History

v0.1		v0.3
General: Initial version	1	General: Add package options: <i>noOverwrite</i> and <i>noWarningOverwrite</i>
v0.2		
General: Fix for xelatex	1	

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