The marmermaidtex package*

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January 26, 2022

1 Introduction

> 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 is no implemation for using mermaid files in latex. So I decide to try it with this package.

2 Preconditions

1. Install mermaid.cli `http://github.com/mermaid-js/mermaid-cli#Install-globally`
   For instance: `npm install -g mermaid.cli`
2. pdflatex available with command line parameter: `--shell-escape`.

3 Usage

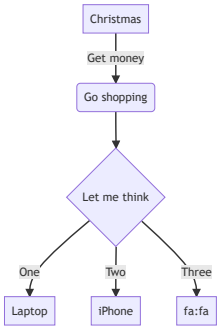
3.1 LaTeX minimal example

`marmermaidtex`

```
\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]
```

*This document corresponds to marmermaidtex v0.01, dated 2022-01-24.

```
        C -->|Three| F[fa:fa-
\end{marmermaidtex}
\end{document}
```



4 Implementation

`marmermaidtex` Definition for a new enivornment and call it marmermaidtex.

```
\newenvironment{marmermaidtex}[2][]{
```

Before:
define a new varible for keys for

```
\def\@graphicsopts{#1}
```

define a new varible for parameter for file name

```
\def\tempFilenameMermaidPdf{#2}
```

to save code to file

```
\csname filecontents*\endcsname[overwrite]{\tempFilenameMermaidPdf.tmp}
}
{
```

After:

```
\csname endfilecontents*\endcsname
```

check if pftlatex is in use

```
\ifpdf
```

call node mmdc

```
\immediate\write18{mmdc -i \tempFilenameMermaidPdf.tmp -f -o \tempFilenameMermaidPdf}
\else
  \errmessage{ You aren't using pdflatex}
\fi
```

include generated image to tex file

```
\expandafter\includegraphics\expandafter[\@graphicsopts]{\tempFilenameMermaidPdf}
}
```