pandoc-plot

A Pandoc filter to generate figures from code blocks in documents

`pandoc-plot` turns code blocks present in your documents (Markdown, LaTeX, etc.) into embedded figures, using your plotting toolkit of choice, including Matplotlib, ggplot2, MATLAB, Mathematica, and more.

Overview

This program is a Pandoc filter. It can therefore be used in the middle of conversion from input format to output format, replacing code blocks with figures.

The filter recognizes code blocks with classes that match plotting toolkits. For example, using the `matplotlib` toolkit:

````
# My document

This is a paragraph.

```{.matplotlib}
import matplotlib.pyplot as plt

plt.figure()
plt.plot([0,1,2,3,4], [1,2,3,4,5])
plt.title('This is an example figure')
```
````

Putting the above in `input.md`, we can then generate the plot and embed it in an HTML page:

```
pandoc --filter pandoc-plot input.md --output output.html
```

The resulting `output.html` looks like this:

```
<h1 id="my-document">My document</h1>

<p>This is a paragraph.</p>

<figure>
<img src="plots\9671478262050082276.png" />
</figure>
```

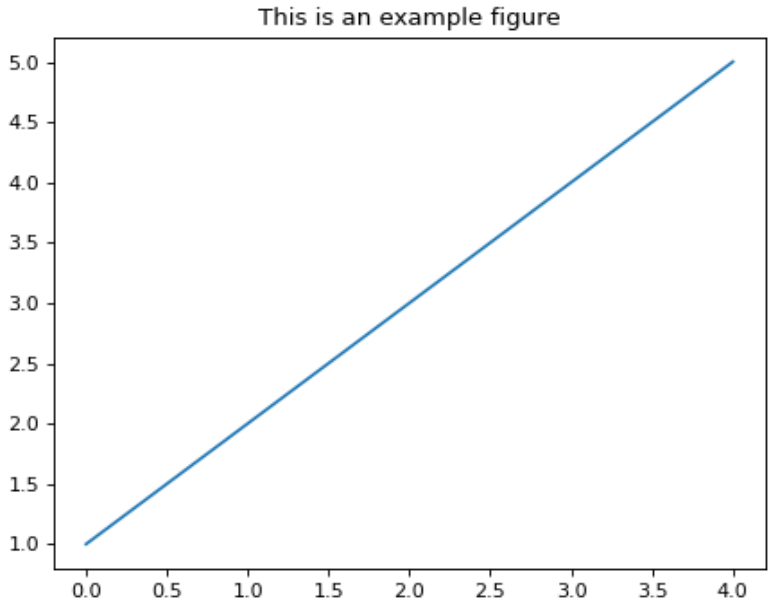
This is an example figure
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0

Figure 1:

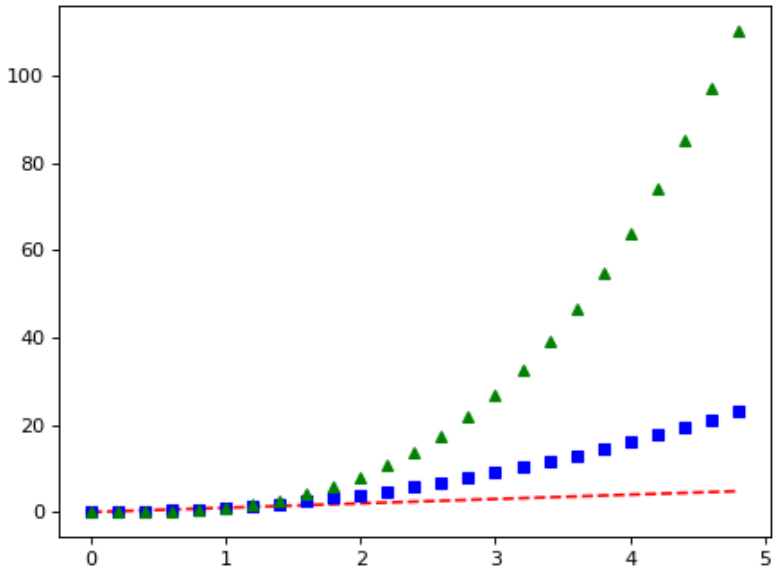

Figure 2:

Supported toolkits

`pandoc-plot` currently supports the following plotting toolkits (**installed separately**):

- `matplotlib`: plots using the matplotlib Python library;
- `plotly_python` : plots using the plotly Python library;
- `plotly_r`: plots using the plotly R library
- `matlabplot`: plots using MATLAB;
- `mathplot` : plots using Mathematica;
- `octaveplot`: plots using GNU Octave;
- `ggplot2`: plots using ggplot2;
- `gnuplot`: plots using gnuplot;
- `graphviz`: graphs using Graphviz;
- `bokeh`: plots using the Bokeh visualization library;
- `plotsjl`: plots using the Julia `Plots.jl` package;
- `plantuml`: diagrams using the PlantUML software suite;
- `sageplot`: plots using the Sage software system.

To know which toolkits are useable on *your machine* (and which ones are not available), you can check with the `toolkits` command:

```
pandoc-plot toolkits
```

Wish your plotting toolkit of choice was available? Please raise an issue!

Documentation

You can find more information in the documentation, available either in the source repository file `MANUAL.md`, on the webpage, or via the command `pandoc-plot --manual`.

Installation

Binaries and Installers

Windows, Linux, and Mac OS binaries are available on the GitHub release page. There are also Windows installers.

conda

Like `pandoc`, `pandoc-plot` is available as a package installable with `conda`. Click here to see the package page.

To install in the current environment:

```
conda install -c conda-forge pandoc-plot
```

Homebrew

`pandoc-plot` is available as a package via `Homebrew`. Click here to see the package page.

To install:

```
brew install pandoc-plot
```

winget

You can install `pandoc-plot` from the Windows Package Manager `winget` (just like `pandoc`). To install:

```
winget install pandoc-plot
```

Arch Linux

You can install `pandoc-plot` from the archlinux user repository as `pandoc-plot-bin`. You can install using e.g. `yay`:

```
yay -S pandoc-plot-bin
```

From Hackage/Stackage

`pandoc-plot` is available on Hackage and Stackage. Using the `cabal-install` tool:

```
cabal update
cabal install
```

From source

Building from source can be done using `cabal`:

```
git clone https://github.com/LaurentRDC/pandoc-plot
cd pandoc-plot
cabal install # Alternatively, `stack install`
```