

drposter: Generate Academic Posters in R Markdown and CSS

Ben Bucior¹, <Your name here>²

¹Northwestern University, Evanston, IL, USA • ²Earth

Overview

- Template for writing HTML/CSS posters using Rmarkdown
- Same conventions as pandoc presentations (e.g. reveal.js)¹⁻³
- Separates content from presentation
- Goal: automatically get consistent spacing from specifications instead of a manual layout



How to use this package

Installation and updates

1. `devtools::install_github("bbucior/drposter", dep=FALSE)` (or `install_local` on a downloaded copy) to install/update the package
2. In RStudio, you can find the format listed as a template under the "New R Markdown" wizard, or use the command line.
3. Template files are cached in `drposter_files/` to decouple your poster from the installed package version. Use `drposter_update` to resync them.

Customizing the template

- Avoid modifying `drposter_files/`
- Indirectly override those rules in your own `custom.css` or equivalent
 - Easier to see and share your changes
 - Decouples your modifications from the base drposter styles
- Customize the format of the bibliography^{5,6} using a CSL style⁴

Export

- View and "print as PDF" from Chrome⁷
- Be sure to save a PDF (and possibly html with `self_contained: true`) to archive your project at the end, in case there are changes in pandoc, rmarkdown, etc.
- You can also render the poster in other formats, such as `github_document` or `revealjs::revealjs_presentation`

Rmarkdown structure

See also the `<source code>` and `<compiled pdf>` for this poster on Github.

```
---
title: Title of your document within R Markdown's YAML header
output: drposter::drposter_poster
---
```

```
# {.col-3}
## Overall document columns (`<h1>`)
```

Content is organized using headers as sections. Level 1 sections define the overall layout of subblocks. Use the ``.col-x`` class to use `x` columns for subblocks.

```
## Another left column block
```

You can place multiple subblocks within the same overall `.col-x`, for example to get a 3-column layout like this example code here.

```
# {.col-3}
## Individual content blocks (`<h2>`)
```

Actual content goes within the level 2 blocks, which have two inner columns by default, e.g. for figures.

```

```

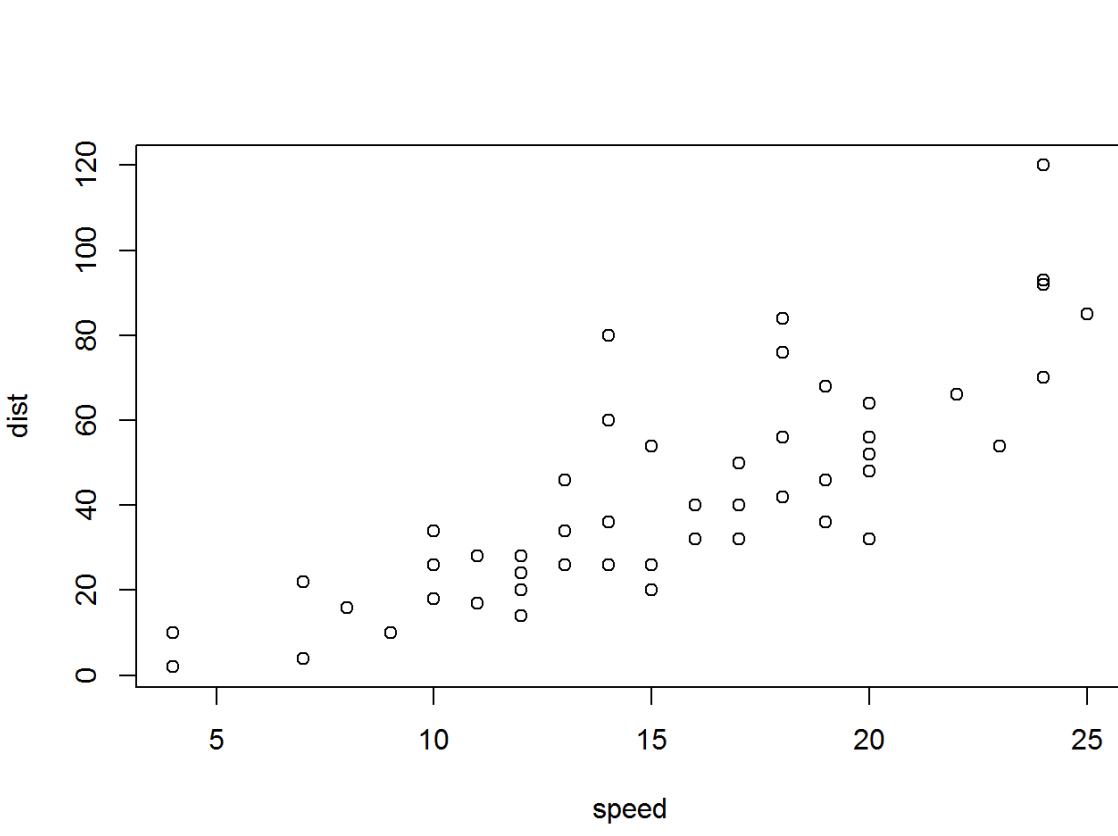
Most of the markdown commands seem to work, though there are probably still some that are untested.

```
# {.col-3}
## Use this div to write your references in a section:
```

```
<div id="refs" class="references"></div>
```

Reproducible research

Directly include plots



Directly include stats

```
##      speed      dist
## Min.   : 4.0    Min.   : 2.00
## 1st Qu.:12.0    1st Qu.:26.00
## Median :15.0    Median :36.00
## Mean   :15.4    Mean   :42.98
## 3rd Qu.:19.0    3rd Qu.:56.00
## Max.   :25.0    Max.   :120.00
```

Customizable themes

Note the features for theming. If you had a special class attached to the `.level1` or `.slides/theme`, you could use a general descendent selector to automatically get theming support, then break up these details into separate theme files.

Default theme

This is an example of the default theme.

Minimalist theme

This is an example of the minimalist theme.

See also

- `tikzposter` latex template, and its example themes for inspiration `<https://bitbucket.org/surmann/tikzposter/downloads/>`
- `<Other R markdown templates>` with their advantages/disadvantages (pdf compatibility, consistent syntax with flexdashboard, etc.)

References

- (1) `<http://lab.hakim.se/reveal-js/#/>`.
- (2) `<https://github.com/rstudio/revealjs>`.
- (3) `<http://rmarkdown.rstudio.com/developer_custom_formats.html>`.
- (4) `<https://github.com/citation-style-language/styles>`.
- (5) `<http://rmarkdown.rstudio.com/authoring_bibliographies_and_citations.html>`.
- (6) `<https://stackoverflow.com/questions/41532707/include-rmd-appendix-after-references>`.
- (7) *Limited testing shows that Firefox also works, but it doesn't yet apply experimental CSS rules for page size.*

Licensing

3rd party

- Package inspired by reveal.js presentation framework¹ and its R package²
- Fonts under their respective licenses
- Logo: thanks to Openclipart for the CC0 `<graduation cap image>`, `<hexSticker>` for sticker generation, and `<bcbioSmallRna>` for a helpful sticker example
- See `<CitationStyles.org>` and the CSL project⁴ for more info about citation options (CC BY SA 3.0)

This package

- drposter may be used under different licenses at your option
- Entire R package: GPLv3 (like `<R markdown>`)
- Files for the `<drposter pandoc template>`: same conditions as the official `<pandoc templates>`
- Poster CSS: `<CC0 public domain>`

Community



For more information, please visit the project page at `<https://github.com/bbucior/drposter>`. Feel free to report issues, pull requests, or general comments on Github.