

Collaborative working in Google Docs with R: introducing `roogledocs`.

Dr. Robert Challen, University of Bristol.

Abstract

This demonstration document uses a template to make some points about the diamonds dataset. The average cost of diamonds was 3932.8 ± 3989.4 . That is all we have to say.

Background

Collaboration with google docs is easy. Importing the results of analysis from R is now possible thanks to `roogledocs`¹. This is great.

Methods

Typically the methods section would not contain figures or tabular materials. We are using the diamonds data set from `ggplot2`.

Results

The diamonds data set has some interesting characteristics as shown in Table 1. Table captions and cross references are not the job of `roogledocs`, although you can probably hack it using tags. Since version 0.3.0 `roogledocs` does handle citations².

Table 1: this table was updated on 27/04/2024. It shows a description of the `ggplot2::diamonds` data set (or at least it will when populated).

cut	colorCat	Size (mean + sd)	Cost (mean + sd)
Fair	D-G	0.93 ± 0.43	3997 ± 3312
	G-J	1.24 ± 0.58	4972 ± 3873
Good	D-G	0.78 ± 0.39	3620 ± 3380
	G-J	1.00 ± 0.54	4610 ± 4194
Very Good	D-G	0.72 ± 0.39	3587 ± 3666
	G-J	1.00 ± 0.54	4873 ± 4358
Premium	D-G	0.79 ± 0.44	4060 ± 4044
	G-J	1.11 ± 0.59	5633 ± 4732
Ideal	D-G	0.63 ± 0.36	3151 ± 3562
	G-J	0.88 ± 0.53	4233 ± 4273

In figure 1, we demonstrate that the cost varies by size. average cost of diamonds being 3932.8 ± 3989.4 . This is the same number as in the abstract.

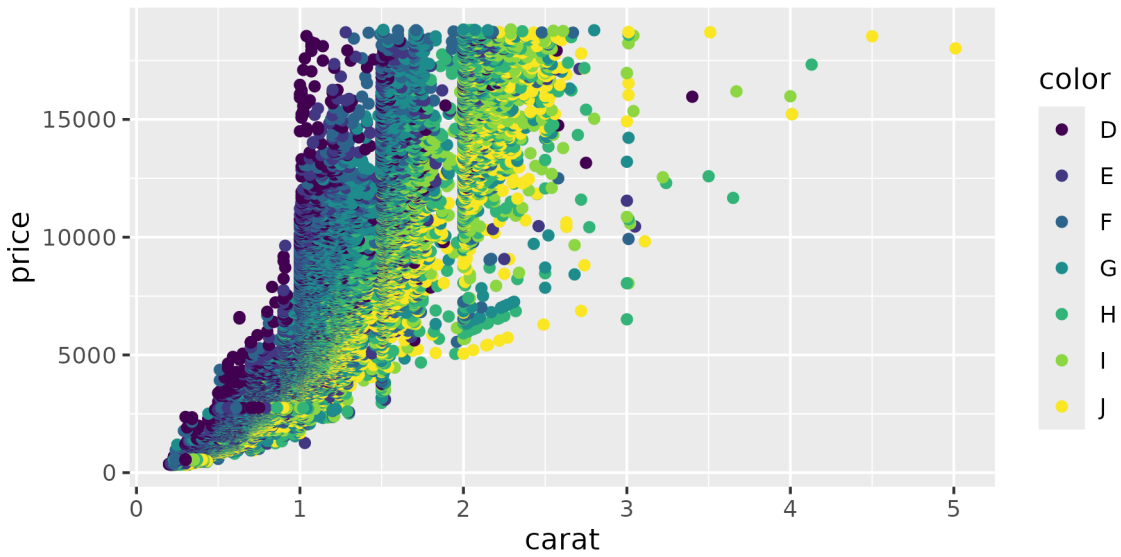


Figure 1 - some info about what figure 1 shows.

Figure 2 shows an alternative to the tag system for images. This is not recommended as the order of images changes as a document evolves. Like any good scientist I will cite myself again ³.

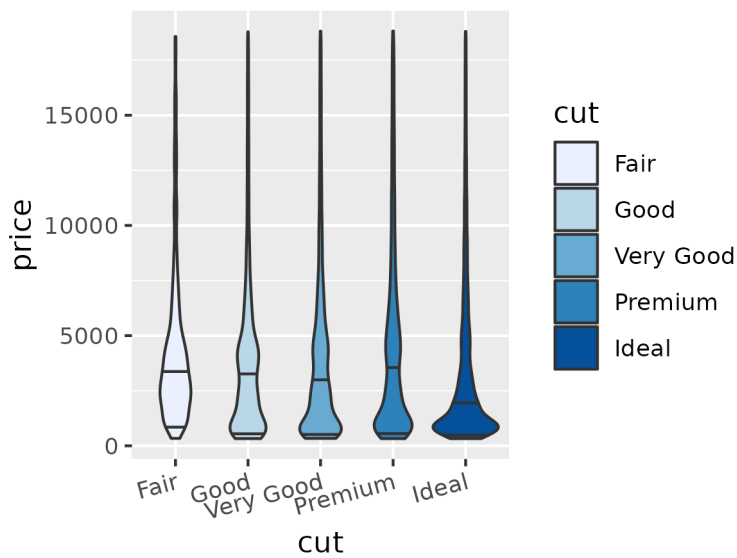


Figure 2 - This is another fascinating plot.

Discussion

This is all there is to it. Roogledocs is built in Java and the R integration is automatically generated by r6-generator ⁴. Don't forget to cite us using the bibtex given to you by:

```
print(citation("roogledocs"), bibtex=TRUE)
```

References

- 1 Challen Rob. roogledocs: R Wrapper For Googledocs Java Library. 2024.

- 2 Challen Robert, Denny Joshua, Pitt Martin, Gompels Luke, Edwards Tom, Tsaneva-Atanasova Krasimira. Artificial intelligence, bias and clinical safety. *BMJ Quality & Safety* 2019;28:231–7. Doi: 10.1136/bmjqs-2018-008370.
- 3 Challen Robert, Dyson Louise, Overton Christopher E., Guzman-Rincon Laura M., Hill Edward M., Stage Helena B., et al. Early epidemiological signatures of novel SARS-CoV-2 variants: establishment of B.1.617.2 in England 2021.
- 4 Challen Rob. r6-generator: Code Generation Framework for using Java within R. 2022.

Adding new content

[Roogledocs](#) is also able to add text at the end of the document with complex formatting. Supporting fonts and font face formatting such as **bold**, *italic* and underlined amongst other things.