

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 citations [2].

Table 1: this table was updated on 05/04/2024. 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.

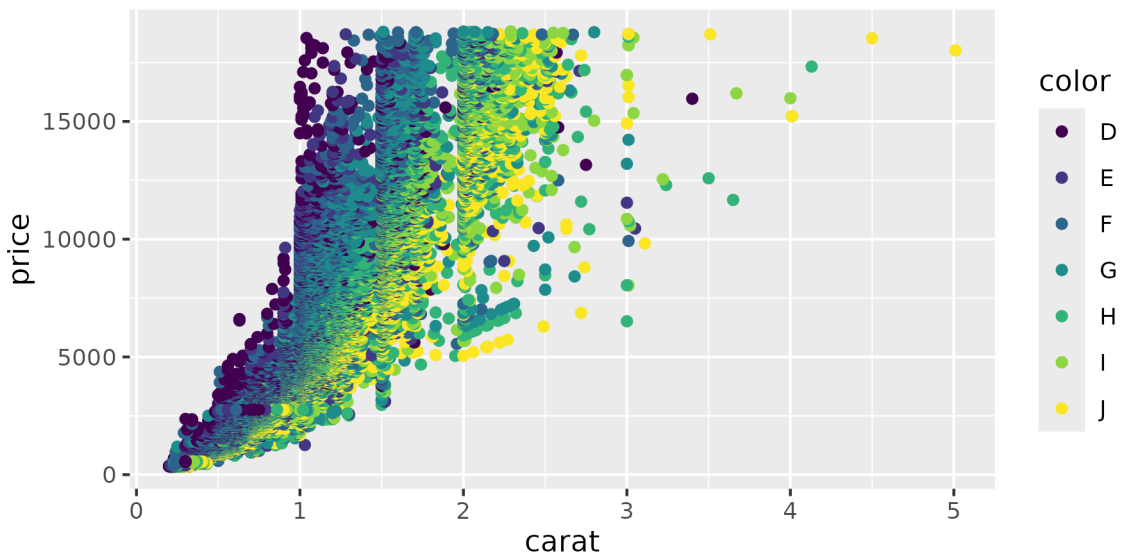


Figure 1 - some info about what figure 1 shows.

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].

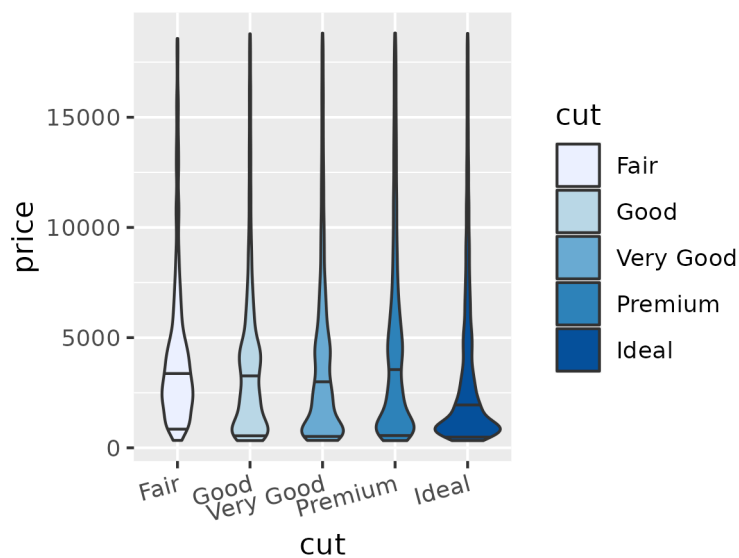


Figure 2 - This is another fascinating plot.

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] R. Challen, roogledocs: R Wrapper For Googledocs Java Library. 2024. doi: 10.5281/zenodo.6576096.

- [2] R. Challen, J. Denny, M. Pitt, L. Gompels, T. Edwards, and K. Tsaneva-Atanasova, “Artificial intelligence, bias and clinical safety,” *BMJ Quality & Safety*, vol. 28, Art. no. 3, Mar. 2019, doi: 10.1136/bmjqs-2018-008370.
- [3] R. Challen et al., “Early epidemiological signatures of novel SARS-CoV-2 variants: establishment of B.1.617.2 in England,” Cold Spring Harbor Laboratory Press, University of Exeter, Jun. 2021. [Online]. Available: <https://www.medrxiv.org/content/10.1101/2021.06.05.21258365v1>
- [4] R. Challen, r6-generator: Code Generation Framework for using Java within R. 2022. doi: 10.5281/zenodo.6644970.

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.