SDS 313 More R Markdown

Instructor

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Contents

In this worksheet, we will:

- Discuss more advanced metadata and code chunk options
- Use the results of our code to format tables
- Knit into other formats such as pdf, word, or slides
- Create your own R Markdown file

We will discuss the structure of the R Markdown file with YAML metadata, text editing, and embedded code.

More YAML metadata

There are many different options added at the top of the document compared to last time! Note that the options after `hmtl_document:` are exclusively for `hmtl` outputs. For example, the `toc` options add a table of contents.

More code chunk options

We can control some global options for the code chunks at the beginning of the document:

We could still set different options for each code chunk. For example, hide the following code chunk:

```
# Import a dataset
films <- read_csv("films.csv")
```

Format tables

Sometimes the outputs of our code are nice enough that they could be formatted into tables directly with `kable()`:

```
# Compare means of IMDB across genres
knitr::kable(
  # Table to show: median for each genre with aggregate
```

```
aggregate(IMDB ~ Genre, data = films, FUN = median),
# Options for the table
col.names = c("Movie Genres", "Median IMDB"),
digits = 1
)
```

Movie Genres	Median IMDB
Action/Adventure	7.1
Animation	7.0
Comedy	6.6
Drama	7.6

For even more options, you could use the `kableExtra`package. Check out the R Documentation for more details!

Knitting into different formats

Let's try generating other types of output. Click on `File > New File > R Markdown` then choose one of the following options:

- Document: `HMTL`, `PDF`, `Word`
- Presentation: any of these options

Note that: inserting `\newpage` or `\pagebreak` to add a new page for pdf or word documents respectively while the headers `##` define a new slide for the presentation.

Group Practice

You will explore the `shelter` dataset, containing information about a sample of cats and dogs that arrived at the Austin Animal Center (data obtained from the City of Austin data portal).

Within your group:

1. Create your own R Markdown file and save it as `Group_*yournumber*`.
2. Change the title and add all contributors as authors.
3. Import the `shelter` dataset, briefly introduce the data and cite its source. Include a cute picture of cats/dogs that you found online (or if you have cats/dogs, include a picture of your own!).
4. Take a quick look at the data. Come up with a data question involving at least two variables from this dataset.
5. Write a sentence or two to interpret your findings.
6. Knit your R Markdown file in different formats.

Upload your favorite output here.