Report.1 In Class Starter (RMD Tricks)

Your Name

March 01, 2022

Table of Contents

# YAML

1. Change the date to be the knitting date always with “March 03, 2022”
2. Table of Contents

* First look at the table of contents shown in RStudio
* Look at the code guide
* Knit the doc and look at the format
* Now make a table of contents by replacing output: html\_Document with the following: output: html\_document: toc: yes Knit the doc and look at the results.
* Make it a floating toc by adding toc\_float: yes below it.

# Adjusting the set up chunk

**Remove** messages, warnings, and code.

Q: How do you know what packages to include?  
A:

Q: What does include = FALSE do?  
A:

# Heading Refresher

##Subheading

Fix the subheading above so it shows up correctly.

### Sub Sub Heading

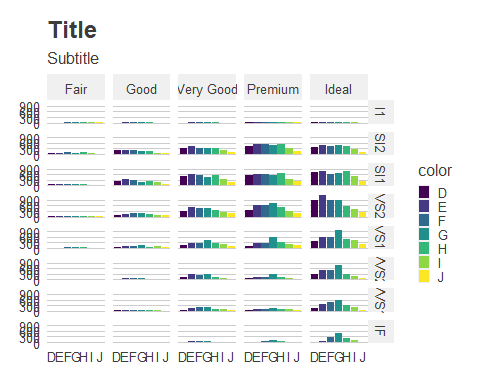
# Spacing

If you would like text on two lines make sure there are two spaces after. Like this.

# Aspect Ratio, Alignment, and Captions

Run the code below and look at the knitted version. Then add dpi= 250, fig.width=7, fig.height=7 to the code chunk header and knit again. Adding fig.cap with add a caption and fig.align can be changed to ‘center’, ‘left’ or ‘right’

diamonds %>%   
 ggplot(aes(x = color, fill = color)) +  
 geom\_bar() +  
 facet\_grid(clarity ~ cut) +  
 labs(title = "Title",   
 subtitle = "Subtitle") +   
 theme\_new + theme(legend.position = "right",   
 legend.direction = "vertical",   
 legend.key.size = unit(.3, "cm"))



# Run all above and below.

Find these buttons and play with them.

# Visual Markdown Editor

Find this buttons and play with them.

# Knitting to doc versus html

Q: How do you knit to a word doc?  
A:

Q: Can you edit a knitted word doc?  
A:

# How to write good comments

Add comments to the following code chunk

diamonds1 <- diamonds  
  
diamonds1 %>%   
 filter(table >= 55) %>%   
 group\_by(color) %>%   
 summarize(med\_price = median(price)) %>%   
 arrange(desc(med\_price)) %>%   
 head(5)

## # A tibble: 5 x 2  
## color med\_price  
## <ord> <dbl>  
## 1 J 4347   
## 2 I 3910.  
## 3 H 3669   
## 4 F 2372.  
## 5 G 2352

diamonds1 <- diamonds1 %>% mutate(table = round(table))

# Tables

Take a look at the gross output of the code chunk above. We can use the pander package to make this a lot more appealing in our knitted file.

You will be outputting 1 summarization table in your knitted report.

# Inline code

Put the mean in the following text.

The mean of the price variable is \_\_\_.

# Debugging

Uncomment the code below and try to debug it.

# diamonds1 %>%   
# mutate(price\_and\_color = paste0("This diamond of color ", str\_to\_lower(color), " is $", format(round(price), big.mark = ",")  
# table = round(table)) %>% head() %>% pander()

The following tips may help:

1. Little red x
2. Rainbow parentheses
3. Stack overflow
4. eval = FALSE

# Projects

Create a dummy project.

getwd()

## [1] "C:/Users/logan/OneDrive - Brigham Young University/Documents/MPA634/Class"

Q: Why would you use a relative or absolute file path?  
A:

# RStudio Hygiene

1. Clean the global environment regularly
2. Restart whenever you have a new session. (OR when you have a code chunk that was working before but isn’t now!)
3. Create a new session if you are working on multiple different projects at the same time.

# Practice

How would I run this code in my markdown file but make sure it doesn’t output anything?

summary(diamonds)

## carat cut color clarity depth   
## Min. :0.2000 Fair : 1610 D: 6775 SI1 :13065 Min. :43.00   
## 1st Qu.:0.4000 Good : 4906 E: 9797 VS2 :12258 1st Qu.:61.00   
## Median :0.7000 Very Good:12082 F: 9542 SI2 : 9194 Median :61.80   
## Mean :0.7979 Premium :13791 G:11292 VS1 : 8171 Mean :61.75   
## 3rd Qu.:1.0400 Ideal :21551 H: 8304 VVS2 : 5066 3rd Qu.:62.50   
## Max. :5.0100 I: 5422 VVS1 : 3655 Max. :79.00   
## J: 2808 (Other): 2531   
## table price x y   
## Min. :43.00 Min. : 326 Min. : 0.000 Min. : 0.000   
## 1st Qu.:56.00 1st Qu.: 950 1st Qu.: 4.710 1st Qu.: 4.720   
## Median :57.00 Median : 2401 Median : 5.700 Median : 5.710   
## Mean :57.46 Mean : 3933 Mean : 5.731 Mean : 5.735   
## 3rd Qu.:59.00 3rd Qu.: 5324 3rd Qu.: 6.540 3rd Qu.: 6.540   
## Max. :95.00 Max. :18823 Max. :10.740 Max. :58.900   
##   
## z   
## Min. : 0.000   
## 1st Qu.: 2.910   
## Median : 3.530   
## Mean : 3.539   
## 3rd Qu.: 4.040   
## Max. :31.800   
##

How would I keep it from running at all?

summary(diamonds)

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How would I run it but hide the code?

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## Max. :31.800   
##

How would I hide any warnings that come in the code?

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