Examples with {gt}

November 23, 2021

Print a Plain Dataframe

```
df <- penguins %>%
  head(n =10)

df %>% gt()
```

species	island	bill_length_mm	bill_depth_mm	flipper_length_mm	body_mass_g	sex	year
Adelie	Torgersen	39.1	18.7	181	3750	male	2007
Adelie	Torgersen	39.5	17.4	186	3800	female	2007
Adelie	Torgersen	40.3	18.0	195	3250	female	2007
Adelie	Torgersen	NA	NA	NA	NA	NA	2007
Adelie	Torgersen	36.7	19.3	193	3450	female	2007
Adelie	Torgersen	39.3	20.6	190	3650	male	2007
Adelie	Torgersen	38.9	17.8	181	3625	female	2007
Adelie	Torgersen	39.2	19.6	195	4675	male	2007
Adelie	Torgersen	34.1	18.1	193	3475	NA	2007
Adelie	Torgersen	42.0	20.2	190	4250	NA	2007

{gtsummary} Example: Default Print Engine

Example where we don't specify print engine:

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels()
```

```
## Table printed with 'knitr::kable()', not {gt}. Learn why at
## http://www.danieldsjoberg.com/gtsummary/articles/rmarkdown.html
## To suppress this message, include 'message = FALSE' in code chunk header.
```

Characteristic	N = 344
Species	
Adelie	152 (44%)
Chinstrap	68 (20%)

Characteristic	N = 344
Gentoo	124 (36%)
Island	
Biscoe	168 (49%)
Dream	124 (36%)
Torgersen	52 (15%)
Bill Length Mm	44.5 (39.2, 48.5)
Unknown	2
Bill Depth Mm	17.30 (15.60, 18.70)
Unknown	2
Flipper Length Mm	197 (190, 213)
Unknown	2
Body Mass G	4,050 (3,550, 4,750)
Unknown	2
Sex	
female	165 (50%)
male	168 (50%)
Unknown	11
Year	
2007	110 (32%)
2008	114 (33%)
2009	120 (35%)

{gtsummary} Example: Specify Print Engine

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels() %>%
  as_gt()
```

Characteristic	N = 344[1]
Species	
Adelie	152 (44%)
Chinstrap	68 (20%)
Gentoo	124 (36%)
Island	
Biscoe	168 (49%)
Dream	124 (36%)
Torgersen	52 (15%)
Bill Length Mm	44.5 (39.2, 48.5)
Unknown	2
Bill Depth Mm	17.30 (15.60, 18.70)
Unknown	2
Flipper Length Mm	197 (190, 213)
Unknown	2
Body Mass G	4,050 (3,550, 4,750)
Unknown	2
Sex	

female	165 (50%)
male	168 (50%)
Unknown	11
Year	
2007	110 (32%)
2008	114 (33%)
2009	120 (35%)

[1]n (%); Median (IQR)

{gtsummary} Example: With Compact Theme

```
theme_gtsummary_compact()
```

```
## Setting theme 'Compact'
```

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels() %>%
  as_gt()
```

Characteristic	N = 344[1]
Species	
Adelie	152 (44%)
Chinstrap	68 (20%)
Gentoo	124 (36%)
Island	
Biscoe	168 (49%)
Dream	124 (36%)
Torgersen	52 (15%)
Bill Length Mm	44.5 (39.2, 48.5)
Unknown	2
Bill Depth Mm	17.30 (15.60, 18.70)
Unknown	2
Flipper Length Mm	197 (190, 213)
Unknown	2
Body Mass G	4,050 (3,550, 4,750)
Unknown	2
Sex	
female	165 (50%)
male	168 (50%)
Unknown	11
Year	
2007	110 (32%)
2008	114 (33%)
2009	120 (35%)

[1]n (%); Median (IQR)

```
reset_gtsummary_theme()
```

{gtsummary} Example: Add Title

```
penguins %>%
  tbl_summary() %>%
  bold_labels() %>%
  italicize_levels()  %>%
  as_gt() %>%
  tab_header("Title")
```

	Title
Characteristic	**N = 344**[1]
Species	
Adelie	152 (44%)
Chinstrap	68 (20%)
Gentoo	124 (36%)
Island	
Biscoe	168 (49%)
Dream	124 (36%)
Torgersen	52 (15%)
Bill Length Mm	44.5 (39.2, 48.5)
Unknown	2
Bill Depth Mm	17.30 (15.60, 18.70)
Unknown	2
Flipper Length Mm	197 (190, 213)
Unknown	2
Body Mass G	4,050 (3,550, 4,750)
Unknown	2
Sex	
female	165 (50%)
male	168 (50%)
Unknown	11
Year	
2007	110 (32%)
2008	114 (33%)
2009	120 (35%)

[1]n (%); Median (IQR)

{gtsummary} Example: Highlight Specific Values

```
x <- penguins %>%
  tbl_summary(by = species) %>%
  add_p() %>%
  bold_labels() %>%
  italicize_levels()  %>%
```

```
  as_gt() %>%
  tab_header("Title")

# To inspect internals of gt object you can do:
#x$`_data`

x$`_data` <- x$`_data` %>%
  mutate(new_cond = parse_number(stat_1))

x %>%
  gt::tab_style(
      style = list(
        cell_fill(color = "purple")
        ),
      locations = cells_body(
        columns = stat_1,
        rows =  new_cond >= 50
      )
    ) %>%
    gt::tab_style(
      style = list(
        cell_fill(color = "red")
        ),
      locations = cells_body(
        columns = everything(),
        rows =  p.value <=  0.05
      )
    )
```

<div align="center">Title</div>

Characteristic	Adelie, N = 152[1]	Chinstrap, N = 68[1]	Gentoo, N = 124[1]	p-value[2]
Island				<0.001
Biscoe	44 (29%)	0 (0%)	124 (100%)	
Dream	56 (37%)	68 (100%)	0 (0%)	
Torgersen	52 (34%)	0 (0%)	0 (0%)	
Bill Length Mm	38.8 (36.8, 40.8)	49.5 (46.3, 51.1)	47.3 (45.3, 49.5)	<0.001
Unknown	1	0	1	
Bill Depth Mm	18.40 (17.50, 19.00)	18.45 (17.50, 19.40)	15.00 (14.20, 15.70)	<0.001
Unknown	1	0	1	
Flipper Length Mm	190 (186, 195)	196 (191, 201)	216 (212, 221)	<0.001
Unknown	1	0	1	
Body Mass G	3,700 (3,350, 4,000)	3,700 (3,488, 3,950)	5,000 (4,700, 5,500)	<0.001
Unknown	1	0	1	
Sex				>0.9
female	73 (50%)	34 (50%)	58 (49%)	
male	73 (50%)	34 (50%)	61 (51%)	
Unknown	6	0	5	
Year				0.5
2007	50 (33%)	26 (38%)	34 (27%)	
2008	50 (33%)	18 (26%)	46 (37%)	
2009	52 (34%)	24 (35%)	44 (35%)	

```
x %>%
  mutate(new_cond = parse_number(stat_0)) %>%
  set_text_color(row = .$new_cond >= 100, 2,  "purple") %>%
  select(-new_cond)
```

{gtsummary} Example: Merged Tables with Spanning Headers

```
sum <- penguins %>%
  select(species, island, sex) %>%
  tbl_summary(by = species) %>%
  add_p()


reg <- glm(species ~ island + sex,
           family = binomial(), data = penguins) %>%
  tbl_regression(exponentiate = TRUE)
```

```
## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred
```

```
## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred

## Warning: glm.fit: fitted probabilities numerically 0 or 1 occurred
```

```r
reg2 <- penguins %>%
  # species limited to certain islands
  select(-island) %>%
  tbl_uvregression(
  method = glm,
  y = species,
  exponentiate = TRUE,
  method.args = list(family = binomial())
)

x <- tbl_merge(list(sum, reg, reg2),
         tab_spanner =
           c("**Summary Statistics**", "**Univariate***",
             "**Multivariate***")) %>%

  as_gt()

# another spanner not possible yet
# x %>%
#   tab_spanner(
#     label = "performance",
#     columns = everything()
#   )


x
```

| | Summary Statistics | | | | Univaria | |
Characteristic	Adelie, N = 152[1]	Chinstrap, N = 68[1]	Gentoo, N = 124[1]	p-value[2]	OR[3]	95% CI[3]
Island				<0.001		
Biscoe	44 (29%)	0 (0%)	124 (100%)		—	—
Dream	56 (37%)	68 (100%)	0 (0%)		0.46	0.28, 0.75
Torgersen	52 (34%)	0 (0%)	0 (0%)		0.00	0.00, 758,956,
Sex				>0.9		
female	73 (50%)	34 (50%)	58 (49%)		—	—
male	73 (50%)	34 (50%)	61 (51%)		1.01	0.61, 1.66
Unknown	6	0	5			
Bill Length Mm						

Bill Depth Mm
Flipper Length Mm
Body Mass G
Year

---

[1]n (%)
[2]Pearson's Chi-squared test
[3]OR = Odds Ratio, CI = Confidence Interval

Add Footnotes

```r
x <- penguins %>%
  head(n = 10) %>%
  gt()


x %>%
  tab_footnote(
    footnote = "island Custom Footnote",
    locations = cells_column_labels(
      columns = island
    )) %>%
  tab_footnote(
    footnote = "species Custom Footnote",
    locations = cells_column_labels(
      columns = species
    ))
```

species[1]	island[2]	bill_length_mm	bill_depth_mm	flipper_length_mm	body_mass_g	sex	year
Adelie	Torgersen	39.1	18.7	181	3750	male	2007
Adelie	Torgersen	39.5	17.4	186	3800	female	2007
Adelie	Torgersen	40.3	18.0	195	3250	female	2007
Adelie	Torgersen	NA	NA	NA	NA	NA	2007
Adelie	Torgersen	36.7	19.3	193	3450	female	2007
Adelie	Torgersen	39.3	20.6	190	3650	male	2007
Adelie	Torgersen	38.9	17.8	181	3625	female	2007
Adelie	Torgersen	39.2	19.6	195	4675	male	2007
Adelie	Torgersen	34.1	18.1	193	3475	NA	2007
Adelie	Torgersen	42.0	20.2	190	4250	NA	2007

[1]species Custom Footnote
[2]island Custom Footnote

Saving Quickly

Produces either an HTML, PDF, PNG, LaTeX, or RTF file.

```
gtsave(x,
       filename = here::here("outputs",
                             "gt-quick-table.pdf"))
```

PhantomJS not found. You can install it with webshot::install_phantomjs(). If it is installed, please

NULL