Examples with {huxtable}

November 22, 2021

# Print a plain dataframe

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | 195 | 3250 | female | 2007 |
| Adelie | Torgersen |  |  |  |  |  | 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 |  | 2007 |
| Adelie | Torgersen | 42 | 20.2 | 190 | 4250 |  | 2007 |

# Print a Plain Dataframe

penguins %>%   
 tbl\_summary() %>%  
 bold\_labels() %>%  
 italicize\_levels() %>%  
 as\_hux\_table()

|  |  |
| --- | --- |
| **Characteristic** | **N = 344** |
| **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%) |
| n (%); Median (IQR) | |

# {gtsummary} Examples

## Default Print Engine

Example where we don’t specify print engine:

penguins %>%   
 tbl\_summary() %>%  
 bold\_labels() %>%  
 italicize\_levels()

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

| Characteristic | N = 3441 |
| --- | --- |
| **Species** |  |
| *Adelie* | 152 (44%) |
| *Chinstrap* | 68 (20%) |
| *Gentoo* | 124 (36%) |
| **Island** |  |
| *Biscoe* | 168 (49%) |
| *Dream* | 124 (36%) |
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| *Unknown* | 2 |
| **Sex** |  |
| *female* | 165 (50%) |
| *male* | 168 (50%) |
| *Unknown* | 11 |
| **Year** |  |
| *2007* | 110 (32%) |
| *2008* | 114 (33%) |
| *2009* | 120 (35%) |
| 1n (%); Median (IQR) | |

## Specify Print Engine

penguins %>%   
 tbl\_summary() %>%  
 bold\_labels() %>%  
 italicize\_levels() %>%  
 as\_hux\_table()

|  |  |
| --- | --- |
| **Characteristic** | **N = 344** |
| **Species** |  |
| *Adelie* | 152 (44%) |
| *Chinstrap* | 68 (20%) |
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| *Unknown* | 2 |
| **Sex** |  |
| *female* | 165 (50%) |
| *male* | 168 (50%) |
| *Unknown* | 11 |
| **Year** |  |
| *2007* | 110 (32%) |
| *2008* | 114 (33%) |
| *2009* | 120 (35%) |
| n (%); Median (IQR) | |

## With Compact Theme

theme\_gtsummary\_compact()

## Setting theme `Compact`

penguins %>%   
 tbl\_summary() %>%  
 bold\_labels() %>%  
 italicize\_levels() %>%  
 as\_hux\_table()

|  |  |
| --- | --- |
| **Characteristic** | **N = 344** |
| **Species** |  |
| *Adelie* | 152 (44%) |
| *Chinstrap* | 68 (20%) |
| *Gentoo* | 124 (36%) |
| **Island** |  |
| *Biscoe* | 168 (49%) |
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| *Unknown* | 2 |
| **Sex** |  |
| *female* | 165 (50%) |
| *male* | 168 (50%) |
| *Unknown* | 11 |
| **Year** |  |
| *2007* | 110 (32%) |
| *2008* | 114 (33%) |
| *2009* | 120 (35%) |
| n (%); Median (IQR) | |

reset\_gtsummary\_theme()

## Add Header

penguins %>%   
 tbl\_summary() %>%  
 bold\_labels() %>%  
 italicize\_levels() %>%  
 as\_hux\_table() %>%  
 set\_caption("Title")

**Table** : Title

|  |  |
| --- | --- |
| **Characteristic** | **N = 344** |
| **Species** |  |
| *Adelie* | 152 (44%) |
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| **Island** |  |
| *Biscoe* | 168 (49%) |
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| **Sex** |  |
| *female* | 165 (50%) |
| *male* | 168 (50%) |
| *Unknown* | 11 |
| **Year** |  |
| *2007* | 110 (32%) |
| *2008* | 114 (33%) |
| *2009* | 120 (35%) |
| n (%); Median (IQR) | |

## Add Footnotes

x <- penguins %>%   
 tbl\_summary() %>%  
 bold\_labels() %>%  
 italicize\_levels() %>%  
 as\_hux\_table() %>%  
 add\_footnote(.,  
 text = "Custom Footnote")

## Highlight Specific Values

Two ways to do this below:

x <- penguins %>%   
 tbl\_summary() %>%  
 bold\_labels() %>%  
 italicize\_levels() %>%  
 as\_hux\_table() %>%  
 set\_caption("Title")   
  
x %>%  
 set\_text\_color(  
 c(1:2, 4:5, 12,14, 16:17, 19:21), 2,  
 "purple")

**Table** : Title

|  |  |
| --- | --- |
| **Characteristic** | **N = 344** |
| **Species** |  |
| *Adelie* | 152 (44%) |
| *Chinstrap* | 68 (20%) |
| *Gentoo* | 124 (36%) |
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| *Unknown* | 2 |
| **Sex** |  |
| *female* | 165 (50%) |
| *male* | 168 (50%) |
| *Unknown* | 11 |
| **Year** |  |
| *2007* | 110 (32%) |
| *2008* | 114 (33%) |
| *2009* | 120 (35%) |
| n (%); Median (IQR) | |

x %>%  
 mutate(new\_cond = parse\_number(stat\_0)) %>%  
 set\_text\_color(  
 row = .$new\_cond >= 100, 2, "purple") %>%  
 select(-new\_cond)

## Warning: 1 parsing failure.  
## row col expected actual  
## 26 -- a number n (%); Median (IQR)

**Table** : Title

|  |  |
| --- | --- |
| **Characteristic** | **N = 344** |
| **Species** |  |
| *Adelie* | 152 (44%) |
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| *Unknown* | 2 |
| **Sex** |  |
| *female* | 165 (50%) |
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| *Unknown* | 11 |
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| *2007* | 110 (32%) |
| *2008* | 114 (33%) |
| *2009* | 120 (35%) |
| n (%); Median (IQR) | |

## 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)  
  
reg <- reg %>%  
 tbl\_regression()

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

tbl\_merge(list(sum, reg),  
 tab\_spanner = c("\*\*Summary Statistics\*\*", "\*\*Regression\*\*\*")) %>%   
   
 as\_hux\_table()

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NA | **Summary Statistics** | | | | **Regression**\* | | |
| **Characteristic** | **Adelie**, N = 152 | **Chinstrap**, N = 68 | **Gentoo**, N = 124 | **p-value** | **log(OR)** | **95% CI** | **p-value** |
| Island |  |  |  | <0.001 |  |  |  |
| Biscoe | 44 (29%) | 0 (0%) | 124 (100%) |  | — | — |  |
| Dream | 56 (37%) | 68 (100%) | 0 (0%) |  | -0.78 | -1.3, -0.29 | 0.002 |
| Torgersen | 52 (34%) | 0 (0%) | 0 (0%) |  | -20 | -337, 20 | >0.9 |
| Sex |  |  |  | >0.9 |  |  |  |
| female | 73 (50%) | 34 (50%) | 58 (49%) |  | — | — |  |
| male | 73 (50%) | 34 (50%) | 61 (51%) |  | 0.01 | -0.49, 0.50 | >0.9 |
| Unknown | 6 | 0 | 5 |  |  |  |  |
| n (%) | | | | | | | |
| Pearson's Chi-squared test | | | | | | | |
| OR = Odds Ratio, CI = Confidence Interval | | | | | | | |

# Saving Quickly