About the chart - Bar: compares aggregated values by categories. Useful for means, counts, and totals by group.

Graphics environment setup and color palette.

# installation   
#install.packages("daltoolbox")  
  
# loading DAL  
library(daltoolbox)

library(RColorBrewer)  
library(ggplot2)  
  
colors <- brewer.pal(4, 'Set1')  
  
# setting the font size for all charts  
font <- theme(text = element\_text(size=16))

Sample data aggregated by Species.

# iris dataset for the example  
head(iris)

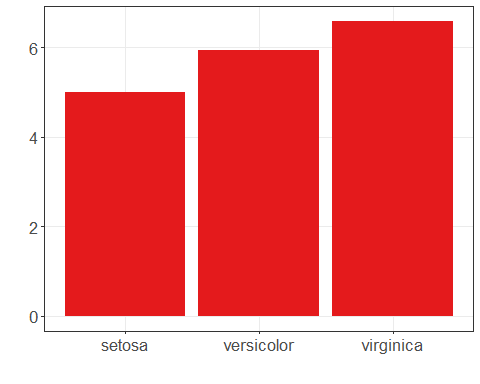
## Sepal.Length Sepal.Width Petal.Length Petal.Width Species  
## 1 5.1 3.5 1.4 0.2 setosa  
## 2 4.9 3.0 1.4 0.2 setosa  
## 3 4.7 3.2 1.3 0.2 setosa  
## 4 4.6 3.1 1.5 0.2 setosa  
## 5 5.0 3.6 1.4 0.2 setosa  
## 6 5.4 3.9 1.7 0.4 setosa

library(dplyr)  
data <- iris |> group\_by(Species) |> summarize(Sepal.Length=mean(Sepal.Length))  
head(data)

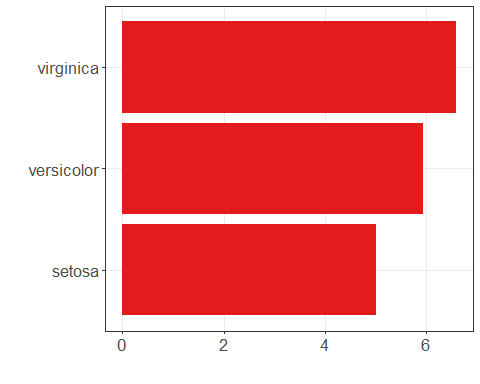
## # A tibble: 3 × 2  
## Species Sepal.Length  
## <fct> <dbl>  
## 1 setosa 5.01  
## 2 versicolor 5.94  
## 3 virginica 6.59

Basic bar chart and a vertical variant.

# Bar chart  
  
# Displays categorical data with bars proportional to the aggregated value (count, mean, etc.).  
  
# More info: https://en.wikipedia.org/wiki/Bar\_chart  
  
grf <- plot\_bar(data, colors=colors[1]) + font  
plot(grf)

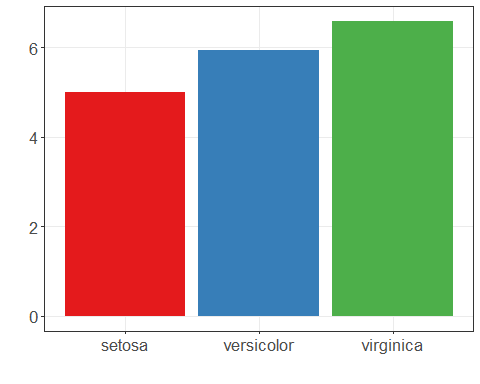


# Bars can be flipped (horizontal/vertical) with coord\_flip().  
grf <- grf + coord\_flip()  
plot(grf)



Color each bar by species.

# Bar graph with one color for each species  
grf <- plot\_bar(data, colors=colors[1:3]) + font  
plot(grf)



References - Wickham, H. (2016). ggplot2: Elegant Graphics for Data Analysis. Springer. - Cleveland, W. S. (1994). The Elements of Graphing Data (2nd ed.). Hobart Press.