

# Data Visualisation Task

RUG @ HSG

After the introduction to *ggplot2* by Gilbert Fontana on 27 October 2022, let's put the skills to work and come up with a chart based on the data below.

You can **hand it your visualisation until the end of the break** to any of our socials. Selected visualisations will be featured on our [instagram account](#)!

## The Data

The data set was created by economist [Kate Pennington](#) and is about rental listing prices in the San Francisco bay area over the period from 2000 to 2018. There is also information on the neighbourhoods, cities and counties.

```
library(tidyverse)
rent <- read_csv("rent_san_francisco_download.csv")
glimpse(rent)

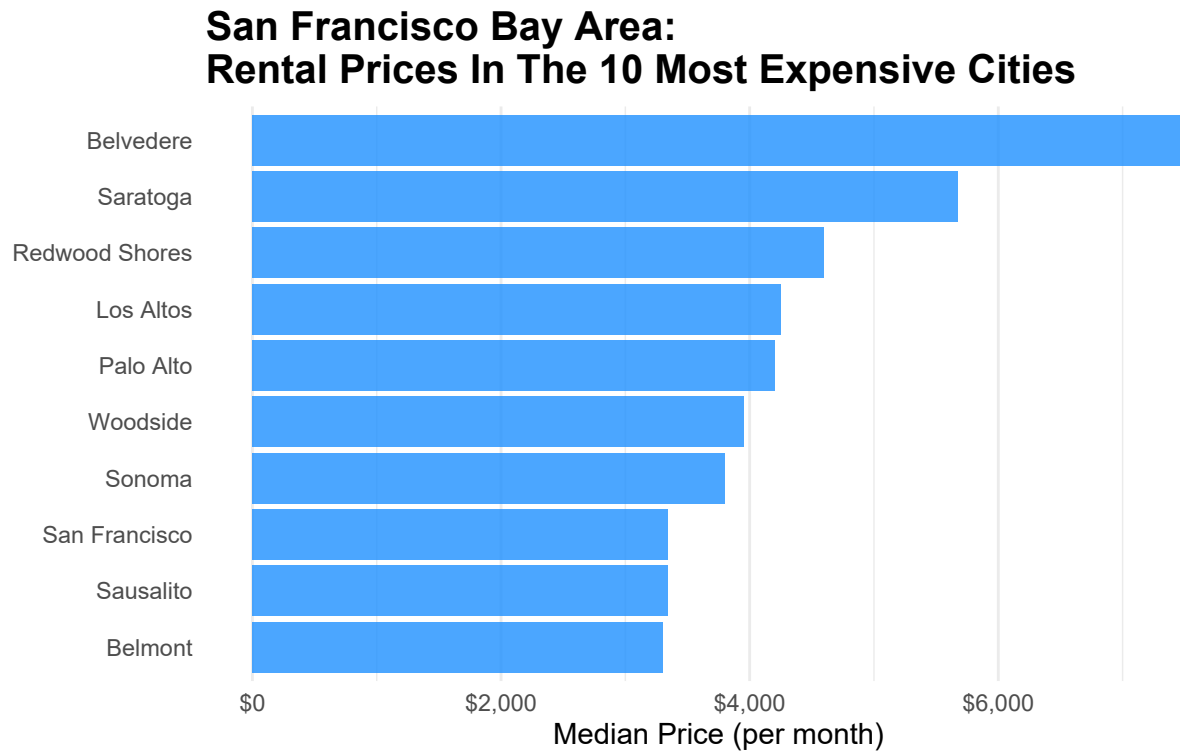
## Rows: 200,796
## Columns: 8
## $ date    <dbl> 20050111, 20050126, 20041017, 20120601, 20041021, 20060411, 200~
## $ year    <dbl> 2005, 2005, 2004, 2012, 2004, 2006, 2007, 2017, 2009, 2006, 200~
## $ nhood    <chr> "alameda", "alameda", "alameda", "alameda", "alameda", "alameda~
## $ city     <chr> "alameda", "alameda", "alameda", "alameda", "alameda", "alameda~
## $ county   <chr> "alameda", "alameda", "alameda", "alameda", "alameda", "alameda~
## $ price    <dbl> 1250, 1295, 1100, 1425, 890, 825, 1500, 2925, 450, 1395, 1555, ~
## $ beds     <dbl> 2, 2, 2, 1, 1, 1, 1, 3, NA, 2, 2, 5, 4, 0, 4, 1, 3, 3, 1, 1, 3,~
## $ title    <chr> "$1250 / 2br - 2BR/2BA    1145 ALAMEDA DE LAS PULGAS", "$1295 / ~
```

## An Example

```
rent %>%
  filter(year == "2018") %>%
  group_by(city) %>%
  summarise(median_price = median(price)) %>%
  slice_max(order_by = median_price, n = 10) %>%
  mutate(city = str_to_title(city)) %>%
  ggplot(aes(x = median_price,
             y = city %>% fct_reorder(median_price))) +
  geom_col(fill = "dodgerblue", alpha = 0.8) +
  labs(title = "San Francisco Bay Area:\nRental Prices In The 10 Most Expensive Cities",
       y = NULL,
       x = "Median Price (per month)") +
```



```
scale_x_continuous(labels = scales::dollar_format()) +  
theme_minimal() +  
theme(panel.grid.major.y = element_blank(),  
      plot.title = element_text(face = "bold", size = 15))
```



Feel free to ask questions in our Q&A chat and hand in your charts. We are looking forward to your submissions!