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

Get the data on the resources section of our website (Task Section -> Data visualization challenge: San Francisco housing). 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.

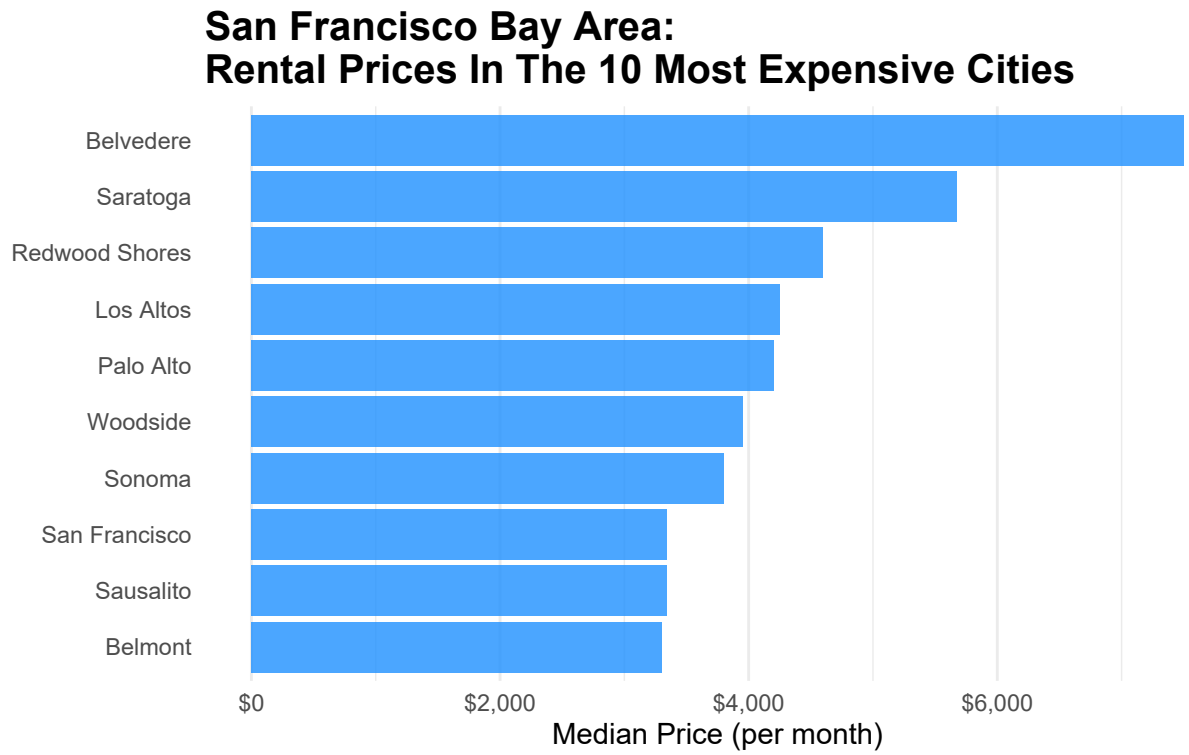
```
library(tidyverse)
rent <- read_csv("rent_san_francisco_download.csv")
glimpse(rent)
```

```
## 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!