

Animating Stock Price and Volume

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```
# Importing stock history from Jan 1, 2017 to date
data <- tq_get("GOOG",
               get = "stock.prices",
               from = "2017-01-01")
```

```
# Creating gganimation plot of price
```

```
p = ggplot(data = data, aes(x=date, y=adjusted)) +
  geom_line(col = "cornflowerblue", size = 1.5) +
  scale_x_date(breaks = pretty_breaks(n = 12)) +
  scale_y_continuous(name="price", labels = scales::dollar) +
  scale_color_continuous(low = "red", high = "green")+
  theme_dark() +
  transition_time(date) +
  ease_aes('linear') +
  labs(title = 'Price - Date: {frame_time}', x = 'Date', y = 'Adjusted Price') +
  shadow_mark(size = 1, colour = 'white')
```

```
# Creating gganimation plot of price
```

```
q = ggplot(data = data, aes(x=date, y=volume)) +
  geom_bar(fill = "cyan", stat = "identity") +
  scale_x_date(breaks = pretty_breaks(n = 12)) +
  scale_y_continuous(labels = scales::comma, breaks = pretty_breaks(n = 6)) +
  theme_minimal() +
  labs(title = 'Volume - Date: {frame_time}', x = 'Date', y = 'Volume') +
  transition_time(date) +
  shadow_mark(size = 1, colour = 'grey')
```

```
# Animating/Converting to magick image
```

```
p_gif <- animate(p,renderer = gifski_renderer(loop = T))
q_gif <- animate(q,renderer = gifski_renderer(loop = T))

p_mgif <- image_read(p_gif)
q_mgif <- image_read(q_gif)
```

```
# Combining Gifs into one using Magick
```

```
new_gif <- image_append(c(p_mgif[1], q_mgif[1]))
for(i in 2:100){
  combined <- image_append(c(p_mgif[i], q_mgif[i]))
  new_gif <- c(new_gif, combined)
}
```

`#Slam run button`

`new_gif`

