Sentiment-Analysis-Aposaga-Layson-Tiad

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```r
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----------------------- tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.1     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.1
## v purrr     1.0.2
## -- Conflicts ------------------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```r
library(lubridate)
library(syuzhet)
```

```
## Warning: package 'syuzhet' was built under R version 4.4.2
```

```r
library(furrr)
```

```
## Warning: package 'furrr' was built under R version 4.4.2
```

```
## Loading required package: future
```

```r
data <- read.csv("tweetsDF.csv")
```

```r
head(data)
```

```
##   X     screenName
## 1 1      whourj31
## 2 2       nnainot
## 3 3   febry_sri_M
## 4 4 telehuntwatch
## 5 5    Typing0824
## 6 6   niccijsmith
##
## 1           A soldier angry at the support fund consolation money for the bereaved family of the Itaeu
## 2                                                                                      Nah this Itae
## 3
```

```
## 4 TRANSLATION :\nSeoul residents lay flowers at a makeshift memorial near the site of the crush in I
## 5  The Itaewon stampede incident really caught me off guard. Makes me notice how important it is to
## 6  "What to do about my child? What to do about my child?" Park Ga-young's mother, Choi Seon-mi, sai
##              created
## 1 2022-10-30 23:59:43
## 2 2022-10-30 23:59:32
## 3 2022-10-30 23:59:31
## 4 2022-10-30 23:59:28
## 5 2022-10-30 23:59:20
## 6 2022-10-30 23:59:04
##                                                                       statusSource
## 1                     <a href="https://www.fs-poster.com/" rel="nofollow">FS_Poster_App</a>
## 2 <a href="http://twitter.com/download/android" rel="nofollow">Twitter for Android</a>
## 3 <a href="http://twitter.com/download/android" rel="nofollow">Twitter for Android</a>
## 4                       <a href="https://ruprop.live" rel="nofollow">telehunt</a>
## 5 <a href="http://twitter.com/download/android" rel="nofollow">Twitter for Android</a>
## 6   <a href="http://twitter.com/download/iphone" rel="nofollow">Twitter for iPhone</a>
##       Created_At_Round tweetSource
## 1 2022-10-31 00:00:00      others
## 2 2022-10-31 00:00:00     android
## 3 2022-10-31 00:00:00     android
## 4 2022-10-31 00:00:00      others
## 5 2022-10-31 00:00:00     android
## 6 2022-10-31 00:00:00      iphone
```

```r
data <- data %>% distinct()

data <- data %>% filter(!is.na(text) & !is.na(created))

data$created <- ymd_hms(data$created)

data$text <- str_squish(data$text)
```
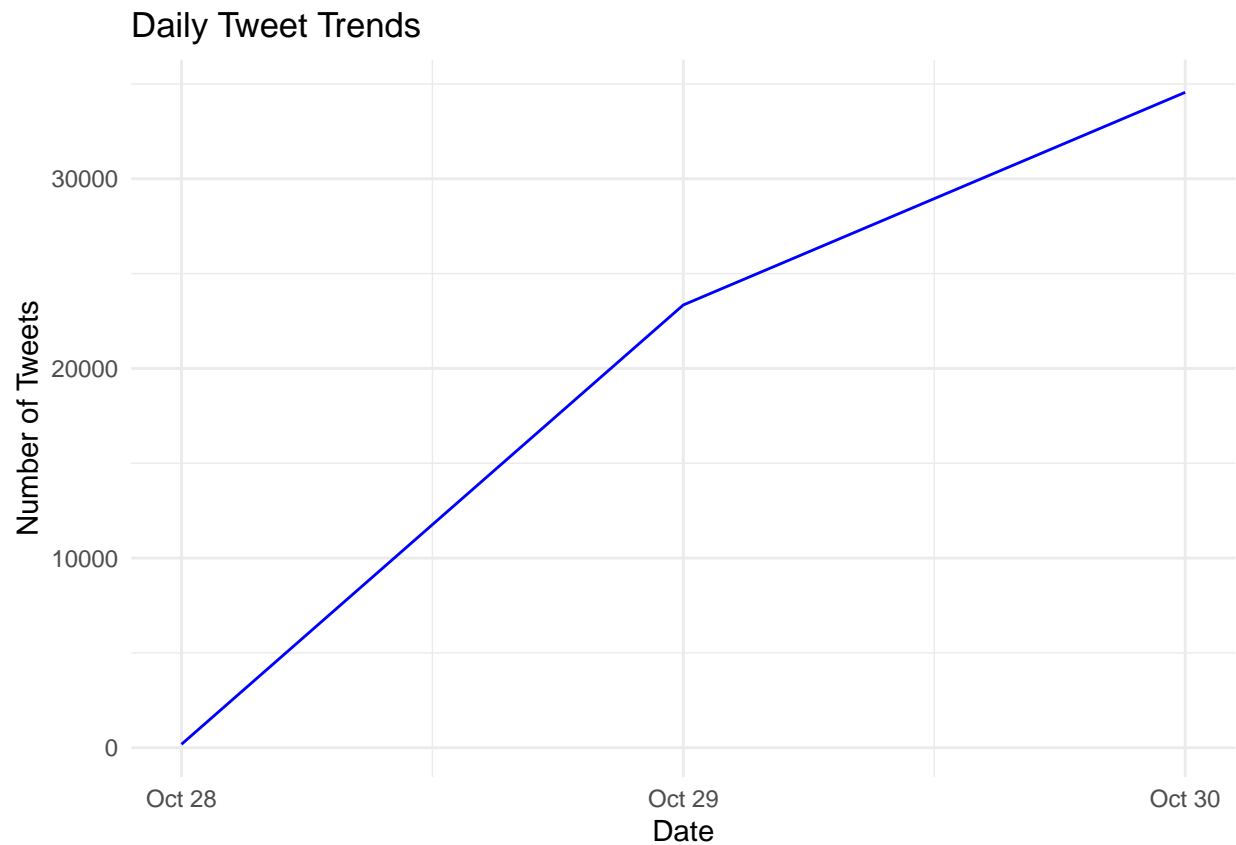
```r
data_daily <- data %>%
  mutate(date = as.Date(created)) %>%
  group_by(date) %>%
  summarise(tweet_count = n())

trend_plot <- ggplot(data_daily, aes(x = date, y = tweet_count)) +
  geom_line(color = "blue") +
  labs(title = "Daily Tweet Trends",
       x = "Date",
       y = "Number of Tweets") +
  theme_minimal()

print(trend_plot)
```

Daily Tweet Trends


```r
process_sentiment <- function(text_batch) {
  return(get_nrc_sentiment(text_batch))
}

plan(multisession)
sentiments_list <- future_map(split(data$text, ceiling(seq_along(data$text) / 1000)), process_sentiment)

sentiments <- bind_rows(sentiments_list)

data_sentiment <- cbind(data, sentiments)

sentiment_summary <- colSums(sentiments)
```
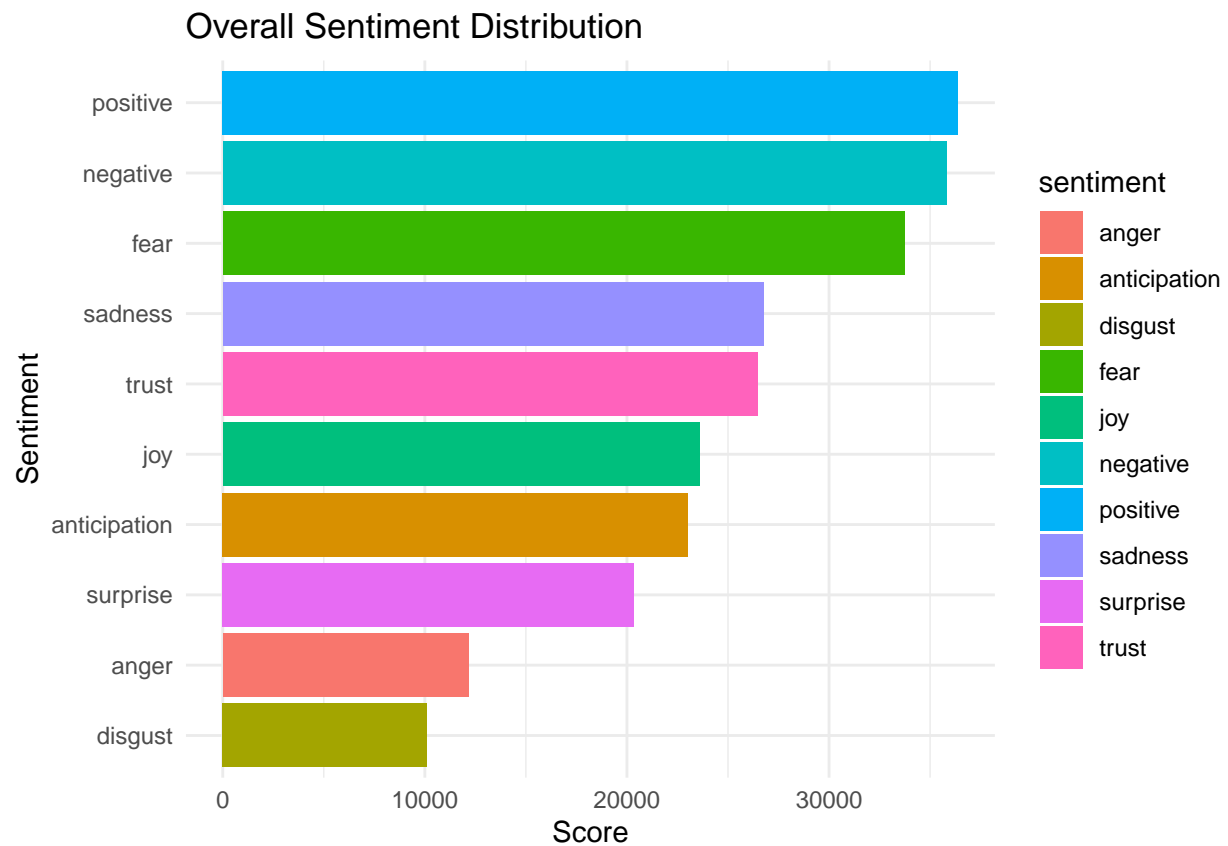
```r
sentiment_summary_df <- as.data.frame(sentiment_summary) %>%
  rownames_to_column(var = "sentiment") %>%
  rename(score = sentiment_summary)

sentiment_plot <- ggplot(sentiment_summary_df, aes(x = reorder(sentiment, score), y = score, fill = sen
  geom_bar(stat = "identity") +
  coord_flip() +
  labs(title = "Overall Sentiment Distribution",
       x = "Sentiment",
       y = "Score") +
  theme_minimal()
```

```
print(sentiment_plot)
```

Overall Sentiment Distribution


```
ggsave("tweet_trend_plot.png", plot = trend_plot)
```

```
## Saving 6.5 x 4.5 in image
```

```
ggsave("sentiment_distribution_plot.png", plot = sentiment_plot)
```

```
## Saving 6.5 x 4.5 in image
```