

genius Example with Jimi Hendrix and the Beatles

I read the Medium post [Introducing geniusR](#) a while ago and gave it a try. Since then this package has become the genius package, without the R. This package give access to the genius website so we can load song lyrics into R. This package does not require an API key.

Alternatively: There are other packages that could be used to download song lyrics and other packages to download other information about songs. But they all seem to require registering to obtain an API keys.

1. The `geniusr` package is an alternative to the `genius` package. Notice this is a different package then the package with a captial R, that became the `genius` package.
2. The `discogger` package can be installed from github. It can be used to download songs from the discogs website.
3. The `spotifyr` can be used to connect to the Spotify API.

```
library(pacman)

p_load(genius, tidyverse, tidytext, tm, wordcloud)

Jimi_Are_You_Experienced <- genius_album(artist = "The Jimi Hendrix Experience",
                                         album = "Are You Experienced [US Version]")
```

```
## Joining, by = c("track_title", "track_n", "track_url")
```

```
Jimi_Are_You_Experienced

## # A tibble: 332 x 4
##   track_title track_n line lyric
##   <chr>         <int> <int> <chr>
## 1 Purple Haze      1     1 Purple haze all in my brain
## 2 Purple Haze      1     2 Lately things, they don't seem the same
## 3 Purple Haze      1     3 Acting funny, but I don't know why! Scuse me while ~
## 4 Purple Haze      1     4 Purple haze all around
## 5 Purple Haze      1     5 Don't know if I'm coming up or down
## 6 Purple Haze      1     6 Am I happy or in misery?
## 7 Purple Haze      1     7 Whatever it is, that girl put a spell on me
## 8 Purple Haze      1     8 Help me! Help me!
## 9 Purple Haze      1     9 Ah no, no
## 10 Purple Haze     1    10 <NA>
## # ... with 322 more rows
```

```
Jimi_songs <- Jimi_Are_You_Experienced %>% select(track_title) %>%
  group_by(track_title) %>%
  summarise(lines = n())
```

```
Jimi_songs2 <- Jimi_songs %>%
  select(track_title)
Jimi_songs2
```

```
## # A tibble: 11 x 1
##   track_title
##   <chr>
```

```

## 1 Are You Experienced?
## 2 Fire
## 3 Foxy Lady
## 4 Hey Joe
## 5 I Don't Live Today
## 6 Love or Confusion
## 7 Manic Depression
## 8 May This Be Love
## 9 Purple Haze
## 10 The Wind Cries Mary
## 11 Third Stone from the Sun

```

```
par(mfrow=c(3,4))
```

```

Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Are You Experienced?") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%
  count(word, sort = TRUE) %>%
  with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Fire") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%
  count(word, sort = TRUE) %>%
  with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Foxy Lady") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%
  count(word, sort = TRUE) %>%
  with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Hey Joe") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%
  count(word, sort = TRUE) %>%
  with(wordcloud(word, n))

Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="I Don't Live Today") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%
  count(word, sort = TRUE) %>%
  with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Love or Confusion") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%
  count(word, sort = TRUE) %>%
  with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Manic Depression") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%
  count(word, sort = TRUE) %>%
  with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="May This Be Love") %>%
  select(lyric) %>%
  unnest_tokens(word, lyric) %>%

```

```

count(word, sort = TRUE) %>%
with(wordcloud(word, n))

Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Purple Haze") %>%
select(lyric) %>%
unnest_tokens(word, lyric) %>%
count(word, sort = TRUE) %>%
with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="The Wind Cries Mary") %>%
select(lyric) %>%
unnest_tokens(word, lyric) %>%
count(word, sort = TRUE) %>%
with(wordcloud(word, n))
Jimi_lyric <- Jimi_Are_You_Experienced %>% filter(track_title=="Third Stone from the Sun") %>%
select(lyric) %>%
unnest_tokens(word, lyric) %>%
count(word, sort = TRUE) %>%
with(wordcloud(word, n))

Jimi_lyric <- Jimi_Are_You_Experienced %>%
select(lyric) %>%
unnest_tokens(word, lyric) %>%
count(word, sort = TRUE) %>%
with(wordcloud(word, n))

```

Word cloud for "Purple Haze" showing the word "you" as the most prominent, followed by "experienced", "are", "the", "have", "but", "and", "to", "ever", "and", "to", "ever", "and", "to", "ever".

Word cloud for "The Wind Cries Mary" showing the word "only" as the most prominent, followed by "with", "over", "it", "have", "the", "only", "with", "over", "it", "have", "the".

Word cloud for "Third Stone from the Sun" showing the word "lady" as the most prominent, followed by "got", "get", "i'm", "belady", "i'm", "belady", "i'm".

Word cloud for "Jimi Are You Experienced" showing the word "ioe" as the most prominent, followed by "he", "ly", "HOW", "said", "ly", "ioe", "he".

Word cloud for "Purple Haze" showing the word "today" as the most prominent, followed by "say", "don't", "uha", "today", "say", "don't", "uha".

Word cloud for "The Wind Cries Mary" showing the word "music" as the most prominent, followed by "he", "of", "this", "ju", "music", "he", "of", "this", "ju".

Word cloud for "Third Stone from the Sun" showing the word "stress" as the most prominent, followed by "ress", "m", "stress", "ress", "m".

Word cloud for "Jimi Are You Experienced" showing the word "with" as the most prominent, followed by "i", "with", "i".

Word cloud for "Purple Haze" showing the word "know" as the most prominent, followed by "my", "or", "know", "my", "or".

Word cloud for "The Wind Cries Mary" showing the word "wind" as the most prominent, followed by "is", "a", "wind", "is", "a", "wind".

Word cloud for "Third Stone from the Sun" showing the word "our" as the most prominent, followed by "our", "our".

Word cloud for "Jimi Are You Experienced" showing the word "messing" as the most prominent, followed by "mind", "nc", "sic", "haze", "gn", "d", "at", "kiss", "abc", "ver", "time", "without", "oh", "e", "for", "messing", "mind", "nc", "sic", "haze", "gn", "d", "at", "kiss", "abc", "ver", "time", "without", "oh", "e", "for".

```

Jimi_lyric <- Jimi_Are_You_Experienced %>%
select(lyric) %>%
unnest_tokens(word, lyric) %>%
count(word, sort = TRUE) %>%
with(wordcloud(word, n))

```



```
## 1 Two of Us      1      1 I Dig a Pygmy by Charles Hawtrey and the Deaf Aids
## 2 Two of Us      1      2 Phase one, in which Doris gets her oats
## 3 Two of Us      1      3 Two of us riding nowhere, spending someone's
## 4 Two of Us      1      4 Hard earned pay
## 5 Two of Us      1      5 You and me Sunday driving, not arriving
## 6 Two of Us      1      6 On our way back home
## 7 Two of Us      1      7 We're on our way home
## 8 Two of Us      1      8 We're on our way home
## 9 Two of Us      1      9 We're going home
## 10 Two of Us     1     10 Two of us sending postcards, writing letters
## # ... with 341 more rows
```

```
The_Beatles_td %>% filter(track_n == 6)
```

```
## # A tibble: 40 x 4
##   track_title track_n line lyric
##   <chr>       <int> <int> <chr>
## 1 Let It Be      6      1 When I find myself in times of trouble, Mother Mar-
## 2 Let It Be      6      2 Speaking words of wisdom, "let it be"And in my hou-
## 3 Let It Be      6      3 Speaking words of wisdom, "let it be"
## 4 Let It Be      6      4 Let it be, let it be
## 5 Let It Be      6      5 Let it be, let it be
## 6 Let It Be      6      6 Whisper words of wisdom
## 7 Let It Be      6      7 Let it be
## 8 Let It Be      6      8 And when the brokenhearted people living in the wo-
## 9 Let It Be      6      9 There will be an answer, let it be
## 10 Let It Be     6     10 For though they may be parted, there is still a ch-
## # ... with 30 more rows
```

```
The_Beatles_Let_It_be <- genius_lyrics(artist = "The Beatles", song = "Let It Be")
The_Beatles_Let_It_be
```

```
## # A tibble: 40 x 3
##   track_title line lyric
##   <chr>       <int> <chr>
## 1 Let It Be      1 When I find myself in times of trouble, Mother Mary comes ~
## 2 Let It Be      2 Speaking words of wisdom, "let it be"And in my hour of dar-
## 3 Let It Be      3 Speaking words of wisdom, "let it be"
## 4 Let It Be      4 Let it be, let it be
## 5 Let It Be      5 Let it be, let it be
## 6 Let It Be      6 Whisper words of wisdom
## 7 Let It Be      7 Let it be
## 8 Let It Be      8 And when the brokenhearted people living in the world agree
## 9 Let It Be      9 There will be an answer, let it be
## 10 Let It Be     10 For though they may be parted, there is still a chance tha-
## # ... with 30 more rows
```

```
The_Beatles_Let_It_be_td <- The_Beatles_Let_It_be %>%
  select(lyric, track_title) %>%
  unnest_tokens(word, lyric)
```

```
The_Beatles_Let_It_be_td
```

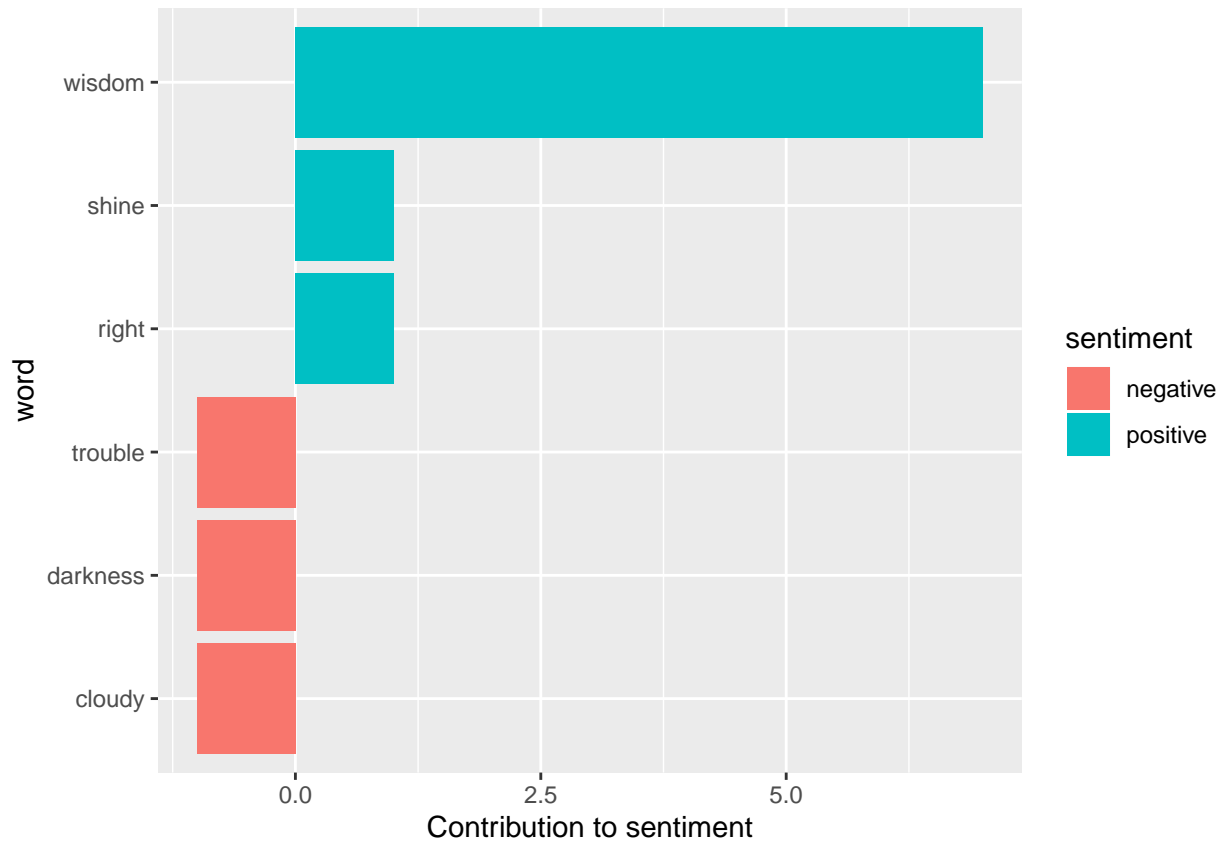
```
## # A tibble: 266 x 2
##   track_title word
##   <chr>       <chr>
## 1 Let It Be    when
```

```
## 2 Let It Be i
## 3 Let It Be find
## 4 Let It Be myself
## 5 Let It Be in
## 6 Let It Be times
## 7 Let It Be of
## 8 Let It Be trouble
## 9 Let It Be mother
## 10 Let It Be mary
## # ... with 256 more rows
```

```
The_Beatles_Let_It_be_sentiments <- The_Beatles_Let_It_be_td %>%
  inner_join(get_sentiments("bing"), by = c(word = "word"))
The_Beatles_Let_It_be_sentiments
```

```
## # A tibble: 12 x 3
##   track_title word      sentiment
##   <chr>        <chr>    <chr>
## 1 Let It Be   trouble negative
## 2 Let It Be   wisdom  positive
## 3 Let It Be   darkness negative
## 4 Let It Be   right   positive
## 5 Let It Be   wisdom  positive
## 6 Let It Be   wisdom  positive
## 7 Let It Be   wisdom  positive
## 8 Let It Be   wisdom  positive
## 9 Let It Be   cloudy  negative
## 10 Let It Be  shine   positive
## 11 Let It Be  wisdom  positive
## 12 Let It Be  wisdom  positive
```

```
The_Beatles_Let_It_be_sentiments %>%
  count(sentiment, word) %>%
  ungroup() %>%
  mutate(n = ifelse(sentiment == "negative", -n, n)) %>%
  mutate(word = reorder(word, n)) %>%
  ggplot(aes(word, n, fill = sentiment)) +
  geom_bar(stat = "identity") +
  ylab("Contribution to sentiment") +
  coord_flip()
```



```
The_Beatles_Let_It_be_dtm <- The_Beatles_Let_It_be_td %>%
  count(track_title, word) %>%
  cast_dtm(track_title, word, n)
```

The_Beatles_Let_It_be_dtm

```
## <<DocumentTermMatrix (documents: 1, terms: 63)>>
## Non-/sparse entries: 63/0
## Sparsity : 0%
## Maximal term length: NA
## Weighting : term frequency (tf)
```

Terms(The_Beatles_Let_It_be_dtm)

```
## [1] "a" "agree" "an" "and"
## [5] "answer" "be" "brokenhearted" "chance"
## [9] "cloudy" "comes" "darkness" "find"
## [13] "for" "front" "hour" "i"
## [17] "in" "is" "it" "let"
## [21] "light" "living" "mary" "may"
## [25] "me" "mother" "music" "my"
## [29] "myself" "night" "of" "on"
## [33] "parted" "people" "right" "see"
## [37] "she" "shine" "shines" "sound"
## [41] "speaking" "standing" "still" "that"
## [45] "the" "there" "they" "though"
## [49] "til" "times" "to" "tomorrow"
## [53] "trouble" "up" "wake" "when"
```

```
## [57] "whisper"      "will"          "wisdom"        "words"
## [61] "world"         "yeah"         NA
```

```
tidy(The_Beatles_Let_It_be_dtm)
```

```
## # A tibble: 63 x 3
##   document term      count
##   <chr>    <chr>    <dbl>
## 1 Let It Be a          2
## 2 Let It Be agree      1
## 3 Let It Be an         5
## 4 Let It Be and        3
## 5 Let It Be answer     5
## 6 Let It Be be        47
## 7 Let It Be brokenhearted 1
## 8 Let It Be chance     1
## 9 Let It Be cloudy     1
## 10 Let It Be comes     2
## # ... with 53 more rows
```

```
# Example with 2 different artists and albums
```

```
artist_albums <- tribble(
  ~artist, ~album,
  "The Beatles", "Let It Be",
  "The Jimi Hendrix Experience", "Are You Experienced [US Version]"
)
artist_albums
```

```
## # A tibble: 2 x 2
##   artist          album
##   <chr>          <chr>
## 1 The Beatles    Let It Be
## 2 The Jimi Hendrix Experience Are You Experienced [US Version]
```

```
albums_td <- artist_albums %>%
  add_genius(artist, album)
```

```
## Joining, by = c("track_title", "track_n", "track_url")
## Joining, by = c("track_title", "track_n", "track_url")
```

```
## Joining, by = c("artist", "album")
```

```
## Warning: `cols` is now required.
## Please use `cols = c(lyrics)`
```

```
albums_td
```

```
## # A tibble: 683 x 6
##   artist      album track_title track_n line lyric
##   <chr>      <chr>   <chr>      <int> <int> <chr>
## 1 The Beatl~ Let It~ Two of Us          1     1 I Dig a Pygmy by Charles Hawtre~
## 2 The Beatl~ Let It~ Two of Us          1     2 Phase one, in which Doris gets ~
## 3 The Beatl~ Let It~ Two of Us          1     3 Two of us riding nowhere, spend~
## 4 The Beatl~ Let It~ Two of Us          1     4 Hard earned pay
## 5 The Beatl~ Let It~ Two of Us          1     5 You and me Sunday driving, not ~
## 6 The Beatl~ Let It~ Two of Us          1     6 On our way back home
## 7 The Beatl~ Let It~ Two of Us          1     7 We're on our way home
## 8 The Beatl~ Let It~ Two of Us          1     8 We're on our way home
```



```
## 9 The Beatl~ Let It~ Two of Us      1    9 We're going home
## 10 The Beatl~ Let It~ Two of Us     1   10 Two of us sending postcards, wr~
## # ... with 673 more rows
```