## Frankenstein Wordcloud

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#### Abstract

This PDF will contain a word cloud and title of the book 'Alice in Wonderland' by Lewis Carroll.

Alice in Wonderland

### 1 packages

This section will contain the packages which will then be used to load 'Alice in Wonderland', manipulate string and form wordclouds.

```
package<-c('dplyr')</pre>
library(tidytext)
library(tm)
## Loading required package: NLP
library(wordcloud)
## Loading required package: RColorBrewer
library(stringr)
library(dplyr)
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
      filter, lag
##
## The following objects are masked from 'package:base':
##
##
      intersect, setdiff, setequal, union
library(knitr)
library(gutenbergr)
```

The first step is to determine the id of Alice in Wonderland:

```
gutenberg_works()%>%
  select(gutenberg_id,title,author)%>%
 filter(author=='Carroll, Lewis')
## # A tibble: 18 x 3
##
     gutenberg_id
##
             <int>
## 1
               11
## 2
               12
## 3
               13
## 4
               620
## 5
              651
## 6
             4763
## 7
            19002
## 8
            28696
## 9
            28885
## 10
            29042
## 11
            29888
## 12
            33582
## 13
            35497
## 14
            35535
## 15
            36308
## 16
             38065
## 17
             48630
## 18
             48795
## # ... with 2 more variables: title <chr>, author <chr>
```

In the resulting tibble from the code above, one can pick out the id of Alice; 11.

# 2 Chapter 1

Here I want to isolate the 'chapter 1' block of text

```
library(stringr)
df <- gutenberg_download(11)

## Determining mirror for Project Gutenberg from http://www.gutenberg.org/robot/harvest
## Using mirror http://aleph.gutenberg.org
head(df[str_detect(df$text, '^CHAPTER'),],n=1)$text
## [1] "CHAPTER I. Down the Rabbit-Hole"</pre>
```

#### 3 The Wordcloud

Next the wordcloud package will be used to form a wordcloud

```
words_df<-df%>%
 unnest_tokens(word,text)
words_df
## # A tibble: 26,694 x 2
##
     gutenberg_id
                       word
##
          <int>
                     <chr>
## 1
            11 alice's
             11 adventures
## 2
## 3
              11
## 4
              11 wonderland
## 5
                     lewis
              11
## 6
              11
                    carroll
   7
##
              11
## 8
              11 millennium
## 9
              11
                  fulcrum
## 10
              11
                    edition
## # ... with 26,684 more rows
```

Using dplyr, we can remove stop words and insignificant

```
words_df<-words_df%>%
  filter(!(word %in% stop_words$word))
words_free <- words_df%>%
  group_by(word)%>%
  summarise(count = n())%>%
  arrange(-count)

wordcloud(words_free$word, words_free$count, min.freq = 25)
```

