# Package 'gutenbergr'

October 7, 2018

Type Package

Title Download and Process Public Domain Works from Project Gutenberg
Version 0.1.4
<b>Date</b> 2018-01-26
<b>Description</b> Download and process public domain works in the Project Gutenberg collection <a href="http://www.gutenberg.org/">http://www.gutenberg.org/</a> . Includes metadata for all Project Gutenberg works, so that they can be searched and retrieved.
License GPL-2
LazyData TRUE
Maintainer David Robinson <admiral.david@gmail.com></admiral.david@gmail.com>
<pre>URL http://github.com/ropenscilabs/gutenbergr</pre>
BugReports http://github.com/ropenscilabs/gutenbergr/issues
VignetteBuilder knitr
<b>Depends</b> R (>= $2.10$ )
Imports dplyr, readr, purrr, urltools, stringr, lazyeval
RoxygenNote 6.0.1
Suggests knitr, rmarkdown, testthat, tidytext, ggplot2, tidyr, curl
NeedsCompilation no
Author David Robinson [aut, cre]
Repository CRAN
<b>Date/Publication</b> 2018-01-26 12:31:18 UTC
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gutenberg\_authors

Metadata about Project Gutenberg authors

#### **Description**

Data frame with metadata about each author of a Project Gutenberg work. Although the Project Gutenberg raw data also includes metadata on contributors, editors, illustrators, etc., this dataset contains only people who have been the single author of at least one work.

#### Usage

```
gutenberg_authors
```

#### **Format**

A tbl\_df (see tibble or dplyr) with one row for each author, with the columns

gutenberg\_author\_id Unique identifier for the author that can be used to join with the gutenberg\_metadata dataset

author The agent\_name field from the original metadata

alias Alias

birthdate Year of birthdeathdate Year of death

wikipedia Link to Wikipedia article on the author. If there are multiple, they are "/"-delimited

aliases Character vector of aliases. If there are multiple, they are "/"-delimited

## Details

To find the date on which this metadata was last updated, run attr( $gutenberg\_authors$ , "date $\_updated$ ").

## See Also

gutenberg\_metadata, gutenberg\_subjects

```
# date last updated
attr(gutenberg_authors, "date_updated")
```

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gutenberg_download	Download one or more works using a Project Gutenberg ID	

## **Description**

Download one or more works by their Project Gutenberg IDs into a data frame with one row per line per work. This can be used to download a single work of interest or multiple at a time. You can look up the Gutenberg IDs of a work using the gutenberg\_works() function or the gutenberg\_metadata dataset.

#### Usage

```
gutenberg_download(gutenberg_id, mirror = NULL, strip = TRUE,
  meta_fields = NULL, verbose = TRUE, ...)
```

## Arguments

gutenberg_id	A vector of Project Gutenberg ID, or a data frame containing a gutenberg_id column, such as from the results of a gutenberg_works() call
mirror	Optionally a mirror URL to retrieve the books from. By default uses the mirror from gutenberg_get_mirror
strip	Whether to strip suspected headers and footers using the <pre>gutenberg_strip</pre> function
meta_fields	Additional fields, such as title and author, to add from <a href="mailto:gutenberg_metadata">gutenberg_metadata</a> describing each book. This is useful when returning multiple
verbose	Whether to show messages about the Project Gutenberg mirror that was chosen
	Extra arguments passed to gutenberg_strip, currently unused

#### **Details**

Note that if strip = TRUE, this tries to remove the Gutenberg header and footer using the gutenberg\_strip function. This is not an exact process since headers and footers differ between books. Before doing an in-depth analysis you may want to check the start and end of each downloaded book.

#### Value

A two column tbl\_df (a type of data frame; see tibble or dplyr packages) with one row for each line of the text or texts, with columns

gutenberg\_id Integer column with the Project Gutenberg ID of each text
text A character vector

```
## Not run:
library(dplyr)

# download The Count of Monte Cristo
gutenberg_download(1184)
```

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```
# download two books: Wuthering Heights and Jane Eyre
books <- gutenberg_download(c(768, 1260), meta_fields = "title")
books
books %>% count(title)

# download all books from Jane Austen
austen <- gutenberg_works(author == "Austen, Jane") %>%
    gutenberg_download(meta_fields = "title")

austen
austen
austen %>%
    count(title)

## End(Not run)
```

gutenberg\_get\_mirror

Get the recommended mirror for Gutenberg files

## Description

Get the recommended mirror for Gutenberg files by accessing the wget harvest path, which is <a href="http://www.gutenberg.org/robot/harvest?filetypes[]=txt">http://www.gutenberg.org/robot/harvest?filetypes[]=txt</a>. Also sets the global gutenberg\_mirror options.

#### Usage

```
gutenberg_get_mirror(verbose = TRUE)
```

## Arguments

verbose

Whether to show messages about the Project Gutenberg mirror that was chosen

gutenberg\_metadata

Gutenberg metadata about each work

## Description

Selected fields of metadata about each of the Project Gutenberg works. These were collected using the gitenberg Python package, particularly the pg\_rdf\_to\_json function.

## Usage

```
gutenberg_metadata
```

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#### **Format**

A tbl\_df (see tibble or dplyr) with one row for each work in Project Gutenberg and the following columns:

```
gutenberg_id Numeric ID, used to retrieve works from Project Gutenberg
title Title
author Author, if a single one given. Given as last name first (e.g. "Doyle, Arthur Conan")
author_id Project Gutenberg author ID
language Language ISO 639 code, separated by / if multiple. Two letter code if one exists, otherwise three letter. See https://en.wikipedia.org/wiki/List_of_ISO_639-2_codes
gutenberg_bookshelf Which collection or collections this is found in, separated by / if multiple
rights Generally one of three options: "Public domain in the USA." (the most common by far),
```

has\_text Whether there is a file containing digits followed by .txt in Project Gutenberg for this record (as opposed to, for example, audiobooks). If not, cannot be retrieved with gutenberg\_download

"Copyrighted. Read the copyright notice inside this book for details.", or "None"

#### **Details**

To find the date on which this metadata was last updated, run attr(gutenberg\_metadata, "date\_updated").

#### See Also

gutenberg\_works, gutenberg\_authors, gutenberg\_subjects

```
library(dplyr)
library(stringr)
gutenberg_metadata
gutenberg_metadata %>%
  count(author, sort = TRUE)
# look for Shakespeare, excluding collections (containing "Works") and translations
shake speare\_metadata <- gutenberg\_metadata \%>\%
  filter(author == "Shakespeare, William",
         language == "en",
         !str_detect(title, "Works"),
         has_text,
         !str_detect(rights, "Copyright")) %>%
         distinct(title)
## Not run:
shakespeare_works <- gutenberg_download(shakespeare_metadata$gutenberg_id)</pre>
## End(Not run)
# note that the gutenberg_works() function filters for English
# non-copyrighted works and does de-duplication by default:
shakespeare_metadata2 <- gutenberg_works(author == "Shakespeare, William",</pre>
```

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```
!str_detect(title, "Works"))
# date last updated
attr(gutenberg_metadata, "date_updated")
```

gutenberg\_strip

Strip header and footer content from a Project Gutenberg book

#### **Description**

Strip header and footer content from a Project Gutenberg book. This is based on some formatting guesses so it may not be perfect. It will also not strip tables of contents, prologues, or other text that appears at the start of a book.

## Usage

```
gutenberg_strip(text)
```

## **Arguments**

text

A character vector with lines of a book

#### **Examples**

```
library(dplyr)
book <- gutenberg_works(title == "Pride and Prejudice") %>%
   gutenberg_download(strip = FALSE)

head(book$text, 10)
tail(book$text, 10)

text_stripped <- gutenberg_strip(book$text)

head(text_stripped, 10)
tail(text_stripped, 10)</pre>
```

gutenberg\_subjects

Gutenberg metadata about the subject of each work

## Description

Gutenberg metadata about the subject of each work, particularly Library of Congress Classifications (lcc) and Library of Congress Subject Headings (lcsh).

#### Usage

```
gutenberg_subjects
```

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#### **Format**

```
A tbl_df (see tibble or dplyr) with one row for each pairing of work and subject, with columns:

gutenberg_id ID describing a work that can be joined with gutenberg_metadata

subject_type Either "lcc" (Library of Congress Classification) or "lcsh" (Library of Congress Subject Headings)

subject Subject
```

#### Details

```
Find more information about Library of Congress Categories here: http://www.loc.gov/catdir/cpso/lcco/, and about Library of Congress Subject Headings here: http://id.loc.gov/authorities/subjects.html.
```

To find the date on which this metadata was last updated, run attr(gutenberg\_subjects, "date\_updated").

#### See Also

```
gutenberg_metadata, gutenberg_authors
```

```
library(dplyr)
library(stringr)
gutenberg_subjects %>%
  filter(subject_type == "lcsh") %>%
  count(subject, sort = TRUE)
sherlock_holmes_subjects <- gutenberg_subjects %>%
  filter(str_detect(subject, "Holmes, Sherlock"))
sherlock_holmes_subjects
sherlock_holmes_metadata <- gutenberg_works() %>%
  filter(author == "Doyle, Arthur Conan") %>%
  semi_join(sherlock_holmes_subjects, by = "gutenberg_id")
sherlock_holmes_metadata
## Not run:
holmes_books <- gutenberg_download(sherlock_holmes_metadata$gutenberg_id)</pre>
holmes_books
## End(Not run)
# date last updated
attr(gutenberg_subjects, "date_updated")
```

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gutenberg_works	Get a filtered table of Gutenberg work metadata

## **Description**

Get a table of Gutenberg work metadata that has been filtered by some common (settable) defaults, along with the option to add additional filters. This function is for convenience when working with common conditions when pulling a set of books to analyze. For more detailed filtering of the entire Project Gutenberg metadata, use the gutenberg\_metadata and related datasets.

## Usage

```
gutenberg_works(..., languages = "en", only_text = TRUE,
  rights = c("Public domain in the USA.", "None"), distinct = TRUE,
  all_languages = FALSE, only_languages = TRUE)
```

## **Arguments**

•••	Additional filters, given as expressions using the variables in the <a href="mailto:gutenberg_metadata">gutenberg_metadata</a> dataset (e.g. author == "Austen, Jane")
languages	Vector of languages to include
only_text	Whether the works must have Gutenberg text attached. Works without text (e.g. audiobooks) cannot be downloaded with gutenberg_download
rights	Values to allow in the rights field. By default allows public domain in the US or "None", while excluding works under copyright. NULL allows any value of Rights
distinct	Whether to return only one distinct combination of each title and gutenberg_author_id. If multiple occur (that fulfill the other conditions), it uses the one with the lowest ID
all_languages	Whether, if multiple languages are given, all of them need to be present in a work. For example, if c("en", "fr") are given, whether only en/fr as opposed to English or French works should be returned
only_languages	Whether to exclude works that have other languages besides the ones provided. For example, whether to include en/fr when English works are requested

## **Details**

By default, returns

- English-language works
- That are in text format in Gutenberg (as opposed to audio)
- Whose text is not under copyright
- · At most one distinct field for each title/author pair

#### Value

A tbl\_df (see the tibble or dplyr packages) with one row for each work, in the same format as gutenberg\_metadata.

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#### **Examples**

```
library(dplyr)
gutenberg_works()

# filter conditions
gutenberg_works(author == "Shakespeare, William")

# language specifications

gutenberg_works(languages = "es") %>%
    count(language, sort = TRUE)

gutenberg_works(languages = c("en", "es")) %>%
    count(language, sort = TRUE)

gutenberg_works(languages = c("en", "es"), all_languages = TRUE) %>%
    count(language, sort = TRUE)

gutenberg_works(languages = c("en", "es"), only_languages = FALSE) %>%
    count(language, sort = TRUE)
```

read\_zip\_url

Read a file from a .zip URL

## Description

Download, read, and delete a .zip file

#### Usage

```
read_zip_url(url)
```

#### **Arguments**

url

URL to a .zip file

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```