Package 'stringb'

July 21, 2016

Title Convenient Base R String Handling

Date 2016-07-15

Version 0.1.1.90000

Description Base R already ships with string handling capabilities
'out-of-the-box' but lacks streamlined function names and workflow.
The stringi (stringr) package on the other hand has well named functions
and allows for a streamlined workflow but adds further dependencies and
regular expression interpretation between base R functions and stringi
functions might differ. This packages aims at closing the gap by providing
another string handling package solely based wrapping bese R functions into
stringr/stringi function names and workflow. Fruthermore, stringb adds
some further convenience functions for sring handling.

Depends R (>= 3.0.0)

License MIT + file LICENSE

LazyData TRUE

Imports stats, graphics

Suggests testthat, knitr, rmarkdown

BugReports <https://github.com/petermeissner/stringb/issues>

URL <https://github.com/petermeissner/stringb>

RoxygenNote 5.0.1

VignetteBuilder knitr

Author Peter Meissner [aut, cre]

Maintainer Peter Meissner <retep.meissner@gmail.com>

R topics documented:

---

dp_ls   *have a look at environments*

Description

have a look at environments

Usage

```
dp_ls(env = globalenv(), filter = FALSE)
```

Arguments

env	environment list objects
filter	filter for classes to be returned

| dp_tf | *text function: wrapper for system.file() to access test files* |

Description

text function: wrapper for system.file() to access test files

Usage

```
dp_tf(x = NULL)
```

Arguments

x   name of the file

| stringb_arrange | *function to sort df by variables* |

Description

function to sort df by variables

Usage

```
stringb_arrange(df, ...)
```

Arguments

df   data.frame to be sorted

...   column names to use for sorting

| stringb_ls | *have a look at environments* |

Description

have a look at environments

Usage

```
stringb_ls(env = globalenv(), filter = FALSE)
```

Arguments

env   environment list objects

filter   filter for classes to be returned

---

stringb_tf	*text function: wrapper for system.file() to access test files*

Description

text function: wrapper for system.file() to access test files

Usage

```
stringb_tf(x = NULL)
```

Arguments

x	name of the file

---

text_collapse	*function for collapsing text vectors*

Description

function for collapsing text vectors

default method for text_collapse()

text_collapse() method for lists

text_collapse() method for data.frames

Usage

```
text_collapse(x, ..., sep)

## Default S3 method:
text_collapse(x, ..., sep = "")

## S3 method for class 'list'
text_collapse(x, ..., sep = "")

## S3 method for class 'data.frame'
text_collapse(x, ..., sep = c("", "\n"))
```

Arguments

x	object to be collapsed
...	additional parameter passed through to methods
sep	separator between text parts

---

text_count *generic for counting pattern occurences*

Description

generic for counting pattern occurences

text_count defaul method

Usage

```
text_count(string, pattern, sum = FALSE, vectorize = FALSE, ...)

## Default S3 method:
text_count(string, pattern, sum = FALSE,
  vectorize = FALSE, ...)
```

Arguments

string	text to search through
pattern	regex to search for
vectorize	should function be used in vectorized mode, i.e. should a pattern with length larger than 1 be allowed and if so, should it be matched to lines (with recycling if needed) instead of using on element on all lines
...	further arguments passed through to gregexpr

---

text_detect *generic function to test if a regex can be found within a string*

Description

generic function to test if a regex can be found within a string

text_detect default method

generic function to test if a regex can be found within a string

Usage

```
text_detect(string, pattern, ...)

## Default S3 method:
text_detect(string, pattern, ...)

text_grepl(string, pattern, ...)
```

Arguments

string	text to be searched through
pattern	regex to look for
...	further arguments passed through to [grepl]

---

text_eval   *wrapper function of eval() and parse() to evaluate character vector*

Description

wrapper function of eval() and parse() to evaluate character vector

Usage

```
text_eval(x, envir = parent.frame(), ...)
```

Arguments

x	character vector to be parsed and evaluated
envir	where to evaluate character vector
...	arguments passed through to eval()

---

text_extract   *extract regex matches*

Description

wrapper function around regexec and regmatches

Usage

```
text_extract(x, pattern, ignore.case = FALSE, perl = FALSE, fixed = FALSE,
  useBytes = FALSE)
```

Arguments

x	text from which to extract
pattern	see [grep]
ignore.case	see [grep]
perl	see [grep]
fixed	see [grep]
useBytes	see [grep]

---

text_extract_all   *extract regex matches*

Description

wrapper function around gregexec and regmatches

Usage

```
text_extract_all(x, pattern, ignore.case = FALSE, perl = FALSE,
  fixed = FALSE, useBytes = FALSE)
```

Arguments

x	text from which to extract
pattern	see grep
ignore.case	see grep
perl	see grep
fixed	see grep
useBytes	see grep

---

text_length   *wrapper around nchar to return text length*

Description

wrapper around nchar to return text length

Usage

```
text_length(x, type = "chars", allowNA = FALSE, keepNA = TRUE,
  na.rm = FALSE)
```

Arguments

x	see nchar
type	see nchar
allowNA	see nchar
keepNA	see nchar
na.rm	see nchar

---

text_locate   *function to get start, end, length form pattern match*

Description

function to get start, end, length form pattern match

text_locate default

Usage

```
text_locate(string, pattern, vectorize = FALSE, ...)

## Default S3 method:
text_locate(string, pattern, vectorize = FALSE, ...)
```

Arguments

string	text to be searched through
pattern	regex to look for
vectorize	should function be used in vectorized mode, i.e. should a pattern with length larger than 1 be allowed and if so, should it be matched to lines (with recycling if needed) instead of using on element on all lines
...	further options passed through to regexpr

---

text_locate_all   *function to get start, end, length form pattern match for all matches*

Description

function to get start, end, length form pattern match for all matches

text_locate_all default

Usage

```
text_locate_all(string, pattern, vectorize = FALSE, simplify = FALSE, ...)

## Default S3 method:
text_locate_all(string, pattern, vectorize = FALSE,
  simplify = FALSE, ...)
```

Arguments

string	text to search through
pattern	regex to search for
vectorize	should function be used in vectorized mode, i.e. should a pattern with length larger than 1 be allowed and if so, should it be matched to lines (with recycling if needed) instead of using on element on all lines
simplify	either getting back a list of results or all list elements merged into a data.frame with columns identifying original line (i) and pattern (p) number
...	further arguments passed through to gregexpr

---

text_locate_all_worker

helper function to get start, end, length form pattern match

Description

helper function to get start, end, length form pattern match

Usage

```
text_locate_all_worker(string, pattern, ...)
```

Arguments

string	text to be searched through
pattern	regex to look for
...	further options passed through to regexpr

---

text_locate_cleanup   *helper function to standardize regexpr results*

Description

helper function to standardize regexpr results

Usage

```
text_locate_cleanup(tmp)
```

Arguments

tmp	regexpr or gregexpr result

---

text_locate_worker *helper function to get start, end, length form pattern match*

Description

helper function to get start, end, length form pattern match

Usage

```
text_locate_worker(string, pattern, ...)
```

Arguments

string	text to be searched through
pattern	regex to look for
...	further options passed through to regexpr

---

text_nchar *wrapper around nchar to return text length*

Description

wrapper around nchar to return text length

Usage

```
text_nchar(x, type = "chars", allowNA = FALSE, keepNA = TRUE)
```

Arguments

x	see nchar
type	see nchar
allowNA	see nchar
keepNA	see nchar

---

text_read *read in text*

Description

A wrapper to readLines() to make things more ordered and convenient. In comparison to the wrapped up readLines() function text_read() does some things differently: (1) If no encoding is given, it will always assume files are stored in UTF-8 instead of the system locale. (2) it will always converts text to UTF-8 instead of transforming it to the system locale. (3) in addition to loading, it offers to tokenize the text using a regular expression or NULL for no tokenization at all.

Usage

```
text_read(file, tokenize = "\n", encoding = "UTF-8", ...)
```

Arguments

file	name or path to the file to be read in or a connection object (see readLines)
tokenize	either NULL so that no splitting is done; a regular expression to use to split text into parts; or a function that does the splitting (or whatever other transformation)
encoding	character encoding of file passed throught to readLines
...	further arguments passed through to readLines like: n, ok, warn, skipNul

---

text_show *function for showing text*

Description

shows text or portions of the text via cat and the usage of text_snippet()

Usage

```
text_show(x, length = 500, from = NULL, to = NULL, coll = FALSE,
  wrap = FALSE)
```

Arguments

x	text to be shown
length	number of characters to be shown
from	show from ith character
to	show up to ith character
coll	should x be collapsed using newline character as binding?
wrap	should text be wrapped, or wrapped to certain width, or wrapped by certain function

---

```
text_snippet                    retrieving text snippet
```

Description

function will give back snippets of text via using length, length and from, length and to, or from and to to specify the snippet

Usage

```
text_snippet(x, length = max(nchar(x)), from = NULL, to = NULL,
  coll = FALSE)
```

Arguments

x	character vector to be snipped
length	length of snippet
from	starting character
to	last character
coll	should a possible vector x with length > 1 collapsed with newline character as separator?

Functions

- text_snippet: retrieving text snippet

```
text_split                    generic splitting strings
```

Description

generic splitting strings

text_split defaul method

Usage

```
text_split(string, pattern, vectorize = FALSE, ...)

## Default S3 method:
text_split(string, pattern, vectorize = FALSE, ...)
```

Arguments

`string`	text to search through
`pattern`	regex to search for
`vectorize`	should function be used in vectorized mode, i.e. should a pattern with length larger than 1 be allowed and if so, should it be matched to lines (with recycling if needed) instead of using on element on all lines
`...`	further arguments passed through to [gregexpr](#)

`text_tokenize`	*generic for gregexpr wrappers to tokenize text*

Description

generic for gregexpr wrappers to tokenize text

default method for text_tokenize generic

function tokenizing rtext objects

Usage

```
text_tokenize(x, regex = NULL, ignore.case = FALSE, fixed = FALSE,
  perl = FALSE, useBytes = FALSE, non_token = FALSE)

## Default S3 method:
text_tokenize(x, regex = NULL, ignore.case = FALSE,
  fixed = FALSE, perl = FALSE, useBytes = FALSE, non_token = FALSE)

## S3 method for class 'rtext'
text_tokenize(x, regex = NULL, ignore.case = FALSE,
  fixed = FALSE, perl = FALSE, useBytes = FALSE, non_token = FALSE)
```

Arguments

`x`	x object to be tokenized
`regex`	regex expressing where to cut see (see [gregexpr](#))
`ignore.case`	whether or not reges should be case sensitive (see [gregexpr](#))
`fixed`	whether or not regex should be interpreted as is or as regular expression (see [gregexpr](#))
`perl`	whether or not Perl compatible regex should be used (see [gregexpr](#))
`useBytes`	byte-by-byte matching of regex or character-by-character (see [gregexpr](#))
`non_token`	should information for non-token, i.e. those patterns by which the text was splitted, be returned as well

Value

data.frame, token: string of the token; from: position in text at which token starts; to: position in text at which the token ends length: length of the token; type: type of the token, either its matched by regular expression used for tokenization or not matched

---

text_tokenize_words   *tokenize text into words*

Description

A wrapper to text_tokenize that tokenizes text into words. Since using text_tokenize()'s option non_token might slow things down considerably this one purpose wrapper is a little more clever than the general implementation and hence much faster.

Usage

```
text_tokenize_words(x, non_token = FALSE)
```

Arguments

x	the text to be tokenized
non_token	whether or not token as well as non tokens shall be returned.

---

text_which   *generic function to know in which elements a pattern can be found*

Description

generic function to know in which elements a pattern can be found

text_which default method

generic function to know in which elements a pattern can be found

Usage

```
text_which(string, pattern, ...)

## Default S3 method:
text_which(string, pattern, ...)

text_grep(string, pattern, ...)
```

Arguments

string	the text to be searched through
pattern	regex to look for
...	further arguments passed through to grepl

---

text_which_value   *generic function to get whole elements in which pattern was found*

Description

generic function to get whole elements in which pattern was found

generic function to get whole elements in which pattern was found

text_which_value default method

Usage

```
text_which_value(string, pattern, ...)

text_grepv(string, pattern, ...)

## Default S3 method:
text_which_value(string, pattern, ...)
```

Arguments

string	the character vector to be searched through
pattern	regex to look for
...	further arguments passed through to grep

---

text_write   *write text to file*

Description

A generic function to write text to file (or a connection) and accompanying methods that wrap writeLines to do so. In contrast to vanilla writeLines() text_write() (1) is a generic so methods, handling something else than character vectors, can be implemented (2) in contrast to writeLines()' default to transform to write text in the system locale text_write() will default to UTF-8 no matter the locale (3) furthermore this encoding can be changed to any encoding supported by iconv (see also iconvlist)

text_write() default

Usage

```
text_write(text, file, sep, encoding = "UTF-8", ...)

## Default S3 method:
text_write(text, file, sep, encoding = "UTF-8", ...)
```

Arguments

text	text to be written
file	file name or file path or an connection object - passed through to writeLines()'s con argument
sep	character to separate lines (i.e. vector elements) from each other - passed through to writeLines()'s con argument
encoding	encoding in which to write text to disk
...	further arguments that might be passed to methods (not used at the moment)

%.%   *function for concatenating strings*

Description

function for concatenating strings

Usage

```
a %.% b
```

Arguments

a	first string
b	first string

%..%   *function for concatenating strings*

Description

function for concatenating strings

Usage

```
a %..% b
```

Arguments

a	first string
b	first string

Index