

Package ‘geocacheR’

May 8, 2026

Type Package

Imports dplyr, stringr, magrittr, tibble, threewords

Title Tools for Geocaching

Version 0.1.0

Date 2020-02-02

Description Tools for solving common geocaching puzzle types, and other Geocaching-related tasks.

License GPL-3

Encoding UTF-8

LazyData true

Suggests testthat

RoxygenNote 7.0.2

NeedsCompilation no

Author Alun Hewinson [cre, aut]

Maintainer Alun Hewinson <alunhewinson@gmail.com>

Repository CRAN

Date/Publication 2020-02-11 10:50:12 UTC

Contents

base64	2
expressCoordinates	2
parseCoordinates	3
qqmiaiii	3
rot	4
rot_all	4
Scrabble	5
Scrabble_score	5
standard_alphabet	6
vigenere	6
w3w	7
word_score	7

Index **9**

base64	<i>A helper table for base64 conversion and lookup</i>
--------	--

Description

A helper table for base64 conversion and lookup

Usage

base64

Format

An object of class tbl_df (inherits from tbl, data.frame) with 64 rows and 3 columns.

expressCoordinates	<i>Express Decimal Coordinates in Other (text) Formats</i>
--------------------	--

Description

Designed to convert into Geocaching-style coordinates, but future styles may be accommodated.

Usage

```
expressCoordinates(x, style = "GC")
```

Arguments

x	A numeric vector of length 2
style	placeholder for future development if requirements emerge

Value

A character of length 1 with an alternative expression of the coordinates

Examples

```
expressCoordinates(c(55.9327, -3.25103))
```

parseCoordinates	<i>Parse Coordinates into Numeric Format</i>
------------------	--

Description

parseCoordinates takes a variety of string inputs for coordinates in the following formats: - N00 00.000 W000 00.000 - N00 00 00 W000 00 00 - N00.0000 W00.0000 and converts them into a numeric vector of length 2

Usage

```
parseCoordinates(x)
```

Arguments

x	A string for the coordinates to be converted
---	--

Value

A numeric vector holding the n(orth) and e(ast) coordinates

Examples

```
parseCoordinates("N55 55.555 W003 14.159")
parseCoordinates("N 55 55.555 E003 14.159")
parseCoordinates("N55.92592 W3.23598")
```

qqmiaiii	<i>Encrypt a string using the Vigenere cipher</i>
----------	---

Description

This is a wrapper for vigenere where decrypt is set to FALSE

Usage

```
qqmiaiii(x, key, alphabet = standard_alphabet)
```

Arguments

x	A string to encrypt or decrypt
key	The encryption or decryption key
alphabet	A list of letters in lower and upper case

See Also

[vigenere](#)

rot	<i>Caesar-shift a string by a given number of letters.</i>
-----	--

Description

Caesar-shift a string by a given number of letters.

Usage

```
rot(x, n = 13, alphabet = standard_alphabet, showWarn = TRUE)
```

Arguments

x	A string.
n	A number of letters to shift the string by.
alphabet	A list containing lower and upper case alphabets.
showWarn	boolean. Do you want to see warnings about alphabets?

Value

A string

Examples

```
rot("abc")
rot("abc", n=2)
rot("abc", n=5, list(lw=letters[1:7], up=LETTERS[1:7]))
```

rot_all	<i>Caesar-shift a string over all possible number n</i>
---------	---

Description

Caesar-shift a string over all possible number n

Usage

```
rot_all(x, alphabet = standard_alphabet)
```

Arguments

x	A string.
alphabet	A list containing lower and upper case alphabets.

Value

a vector of strings

Examples

```
rot_all("abc")
rot_all("abc", list(lw=letters[1:7], up=LETTERS[1:7]))
```

Scrabble

Value and frequency of Scrabble letters

Description

Value and frequency of Scrabble letters

Usage

Scrabble

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 27 rows and 3 columns.

Scrabble_score

Find the Scrabble value of words

Description

Find the Scrabble value of words

Usage

```
Scrabble_score(x, language = "en")
```

Arguments

<code>x</code>	A vector of character strings
<code>language</code>	A character string for the linguistic Scrabble edition, conforming to ISO 639-1 Current supported languages: en

Value

An integer vector

Examples

```
Scrabble_score(c("kwyjibo", "jozxyqk"))
```

standard_alphabet	<i>The standard alphabet for the locale, for use in Caesar-based encryption etc.</i>
-------------------	--

Description

The standard alphabet for the locale, for use in Caesar-based encryption etc.

Usage

standard_alphabet

Format

An object of class list of length 2.

vigenere	<i>Encrypt or decrypt a string using a key</i>
----------	--

Description

Encrypt or decrypt a string using a key

Usage

```
vigenere(x, key, decrypt = TRUE, alphabet = standard_alphabet)
```

Arguments

x	A string to encrypt or decrypt
key	The encryption or decryption key
decrypt	Are you decrypting an encrypted string?
alphabet	A list of letters in lower and upper case

Value

A string

Examples

```
vigenere("MN vdopf wq brcep zwtcd.", "midway")
vigenere("My treasure is buried he... find it who may.", "La Bouche", decrypt = FALSE)
```

`w3w`*What 3 Words wrapper*

Description

This function requires you to have a valid what3words API key called W3WAPIKey stored as an environment variable

Usage`w3w(x)`**Arguments**

`x` A vector, or list, of words. Strings with dots in them will be split. After splitting, there must be a multiple of three words. Either a vector of words, for a single latitude/longitude pair, or a list of vectors for vectorised operations. This wrapper also accepts a single string of three words separated by full stops.

Value

a numeric vector of length 2, consisting of lat(itude) and lon(gitude)

Examples

```
## Not run:
w3w("president.always.lying")
w3w("unseen.academicals.football") ## returns NAs
w3w(list("special.tools.required", "cliffs.falling.rocks",
        "available.during.winter", "ultraviolet.light.required"))
w3w(c("protests", "memo", "consoles"))

## End(Not run)
```

`word_score`*Find the value of words*

Description

Find the value of words

Usage`word_score(x)`

Arguments

x A vector of character strings

Value

An integer vector

Examples

```
word_score(c("infinite", "monkey", "cage"))
```

Index

* datasets

base64, 2

Scrabble, 5

standard_alphabet, 6

base64, 2

expressCoordinates, 2

parseCoordinates, 3

qqmiaiii, 3

rot, 4

rot_all, 4

Scrabble, 5

Scrabble_score, 5

standard_alphabet, 6

vigenere, 3, 6

w3w, 7

word_score, 7