

# Package ‘crossword.r’

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**Type** Package

**Title** Generating Crosswords from Word Lists

**Version** 0.3.6

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**Description** Generate crosswords from a list of words.

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**Encoding** UTF-8

**LazyData** true

**Imports** R6 (>= 2.2.0), dplyr (>= 0.5.0), stringr (>= 1.2.0), magrittr (>= 1.5), jsonlite (>= 1.5), r6extended (>= 0.1.1)

**RoxygenNote** 6.0.1

**Suggests** covr, testthat

**NeedsCompilation** no

**Repository** CRAN

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Crossword

*Crossword*

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### Description

Crossword

### Usage

Crossword

### Format

An [R6Class](#) generator object for generating crosswords from word lists

### Fields

`letters` a character matrix representing the grid of the crossword

`words` a data.frame like (tibble) storing words, their position on the grid (row, col), their length in character, their direction ("right", "down") the word and the clue

### Methods

`add_words(words, clues = NULL)` this method will try to add words to the crossword by placing it on the grid; `clues` is optional and should be the same length;

`density()` gives back statistics on fill state of grid

`to_json(pretty = FALSE)` this exports grid and word list data to JSON for external usage; `pretty` parameter determines if this is done in a human readable or more machine efficient way

### Examples

```
library(crossword.r)
cw <- Crossword$new(rows = 4, columns = 4)
cw$add_words(c("back", "nasa", "kick", "nuk", "ic", "sic"))
cw
cw$letters
cw$words
cw$density()
```

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cw\_greplv *a vectorized version of grep*

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**Description**

a vectorized version of grep

**Usage**

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

**Arguments**

pattern	character string containing a <a href="#">regular expression</a> (or character string for fixed = TRUE) to be matched in the given character vector. Coerced by <a href="#">as.character</a> to a character string if possible. If a character vector of length 2 or more is supplied, the first element is used with a warning. Missing values are allowed except for regexpr and gregexpr.
x	a character vector where matches are sought, or an object which can be coerced by <a href="#">as.character</a> to a character vector. <a href="#">Long vectors</a> are supported.
ignore.case	if FALSE, the pattern matching is <i>case sensitive</i> and if TRUE, case is ignored during matching.
perl	logical. Should Perl-compatible regexps be used?
fixed	logical. If TRUE, pattern is a string to be matched as is. Overrides all conflicting arguments.
useBytes	logical. If TRUE the matching is done byte-by-byte rather than character-by-character. See 'Details'.

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cw\_matrix\_to\_df *function that turn matrix into a data.frame in long format*

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**Description**

function that turn matrix into a data.frame in long format

**Usage**

```
cw_matrix_to_df(x)
```

**Arguments**

x	the data.frame to transform
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`cw_normalize_words`      *normalize words to be added to grid*

---

**Description**

normalize words to be added to grid

**Usage**

```
cw_normalize_words(words)
```

**Arguments**

`words`                      character vector of words to normalize for crossword usage

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`cw_to_json`                      *function implementing to\_json method*

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**Description**

function implementing to\_json method

**Usage**

```
cw_to_json(cw, pretty = FALSE)
```

**Arguments**

`cw`                              an object of class crossword  
`pretty`                          should json formatted to be mor human readable or not

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`cw_wordlist_animal_en`      *en - animals*

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**Description**

data frame of words and clues

**Usage**

```
cw_wordlist_animal_en
```

**Format**

An object of class `data.frame` with 68 rows and 2 columns.

---

%>% *re-export magrittr pipe operator*

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**Description**

re-export magrittr pipe operator

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