

Package ‘ggpacman’

May 16, 2020

Title A 'ggplot2' and 'gganimate' Version of Pac-Man

Version 0.1.0

Description

A funny coding challenge to reproduce the game Pac-Man using 'ggplot2' and 'gganimate'. It provides a pre-defined moves set for Pac-Man and the ghosts for the first level of the game Pac-Man as well as polygon datasets to draw ghosts in 'ggplot2'.

License GPL-3

URL <https://github.com/mcanouil/pacman>

BugReports <https://github.com/mcanouil/pacman/issues>

Depends R (>= 3.6.0)

Imports stats, utils, rlang (>= 0.1.2), magrittr (>= 1.5), dplyr (>= 0.8.5), tidyr (>= 1.0.2), purrr (>= 0.3.3), ggplot2 (>= 3.3.0), ggforce (>= 0.3.1), gganimate (>= 1.0.5)

Suggests roxygen2 (>= 7.1.0)

Encoding UTF-8

LazyData true

RoxygenNote 7.1.0

Collate 'pacman-package.R' 'compute_points_eaten.R'
'compute_pacman_coord.R' 'compute_ghost_status.R'
'compute_ghost_coord.R' 'animate_pacman.R'

NeedsCompilation no

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animate_pacman	<i>Create a Pac-Man Game GIF</i>
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Description

Create a Pac-Man Game GIF

Usage

```
animate_pacman(
  pacman,
  ghosts,
  file = NULL,
  caption = iconv("© Mickaël 'Coeos' Canouil", "UTF-8"),
  font_family = ""
)
```

Arguments

pacman	A data.frame with the coordinates of Pac-Man moves.
ghosts	A list of data.frame with the coordinates of (each) Ghost moves.
file	File name to save GIF on disk.
caption	A caption to add below the GIF.
font_family	The font family to use for the caption.

Value

Returns a gif_image object. See ganimate::gifski_renderer.

Examples

```
library(ggpacman)
if (interactive()) {
  animate_pacman(pacman = pacman, ghosts = list(blinky, pinky, inky, clyde))
}
```

blinky

Blinky moves

Description

Blinky moves

Usage

blinky

Format

A [\[tbl\]](#) object.

clyde

Clyde moves

Description

Clyde moves

Usage

clyde

Format

A [\[tbl\]](#) object.

compute_ghost_coord *Compute Ghost Coordinates*

Description

Compute Ghost Coordinates

Usage

```
compute_ghost_coord(data)
```

Arguments

data A data.frame with the coordinates of Ghost moves.

Value

Returns a tibble of cartesian coordinates.

compute_ghost_status *Compute Ghost Status*

Description

Compute a ghost status, *i.e.*, normal, weak or eaten.

Usage

```
compute_ghost_status(ghost, pacman_moves, bonus_points_eaten)
```

Arguments

ghost A data.frame with the coordinates of Ghost moves.

pacman_moves Pac-Man computed moves.

bonus_points_eaten Computed data for points eaten by Pac-Man.

Value

Returns a tibble with ghost status as a column along side coordinates.

`compute_pacman_coord` *Compute Pac-Man Coordinates*

Description

Compute Pac-Man Coordinates

Usage

`compute_pacman_coord(data)`

Arguments

`data` A data.frame with the coordinates of Pac-Man moves.

Value

Returns a tibble of cartesian coordinates and Pac-Man direction.

`compute_points_eaten` *Compute Point Eaten by Pac-Man*

Description

Compute Point Eaten by Pac-Man

Usage

`compute_points_eaten(bonus_points, pacman_moves)`

Arguments

`bonus_points` Bonus points coordinates.
`pacman_moves` Pac-Man computed moves.

Value

Returns a tibble with the coordinates of point eaten by Pac-Man.

ghost_body	<i>Ghost Body Polygon</i>
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Description

Ghost Body Polygon

Usage

ghost_body

Format

A [tbl] object.

ghost_eyes	<i>Ghost Eyes Polygon</i>
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Description

Ghost Eyes Polygon

Usage

ghost_eyes

Format

A [tbl] object.

inky	<i>Inky moves</i>
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Description

Inky moves

Usage

inky

Format

A [tbl] object.

maze_points	<i>Maze Points</i>
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Description

Maze Points

Usage

maze_points

Format

A [tbl] object.

maze_walls	<i>Maze Walls</i>
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Description

Maze Walls

Usage

maze_walls

Format

A [tbl] object.

pacman	<i>Pac-Man moves</i>
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Description

Pac-Man moves

Usage

pacman

Format

A [tbl] object.

`pinky`

Pinky moves

Description

Pinky moves

Usage

`pinky`

Format

A [tbl](#) object.

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