

Package: ppdf (via r-universe)

September 4, 2024

Encoding UTF-8

Type Package

Title Board game setups

Version 0.1.0-5

Description Generate 'tibble' data frames indicating how to set up over a hundred board games playable with public domain game systems. Data format can be used by 'piecepackr' to generate graphics with the 'grid', 'ggplot2', 'rayrender', 'rayvertex', and 'rgl' graphics systems and by 'ppcli' to generate plaintext graphics with 'cli'.

License MIT + file LICENSE

URL <https://github.com/piecepackr/ppdf>

BugReports <https://github.com/piecepackr/ppdf/issues>

LazyLoad yes

Depends R (>= 3.4.0)

Imports dplyr, purrr, rlang, stringr, tibble, utils, withr,

Suggests knitr, piecepackr (>= 1.10.1), ppcli, snakecase, testthat, vdiff

Remotes piecepackr/ppcli

Roxygen list(markdown = TRUE)

RoxygenNote 7.2.3

Config/testthat/edition 3

Repository <https://piecepackr.r-universe.dev>

RemoteUrl <https://github.com/piecepackr/ppdf>

RemoteRef HEAD

RemoteSha 08f26a0124acfb33612083a4c85ee759e6f39c70

Contents

checkers_board	2
checkers_games_other	3
checkers_games_variant	4
chess_games_variant	6
dominoes_games_variant	6
games_info	7
normalize_name	8
piecepack_games_checkers	8
piecepack_games_chess	10
piecepack_games_original	11
piecepack_games_other	15
piecepack_games_traditional	16
piecepack_rect_board_tiles	17
setup_by_name	18
setup_none	19
stackpack_games	20
Index	22

checkers_board	<i>Checkers boards</i>
----------------	------------------------

Description

checkers_board() returns a square checkers board of desired size and type.

chess_board() returns a square checkered board of desired size and type.

Usage

```
checkers_board(
  nrows = 8L,
  ncols = nrows,
  x0 = 1,
  y0 = 1,
  ...,
  piece_side = "board_face",
  suit = 3L,
  angle = 0,
  cell_width = 1L
)
```

```
chess_board(
  nrows = 8L,
  ncols = nrows,
  x0 = 1,
  y0 = 1,
```

```

    ...,
    piece_side = "board_face",
    suit = 3L,
    angle = 0,
    cell_width = NULL
  )

```

Arguments

nrows	Number of rows in game board
ncols	Number of columns in game board
x0	X coordinate for the center of the first cell
y0	Y coordinate for the center of the first cell
...	Ignored
piece_side	If "board_face" a checkered board (as in American Checkers). If "board_back" a lined board (as in Turkish Checkers).
suit	Suit value (color) of board. 2L is "black" and 3L is "green".
angle	Angle of board in degrees. Italian Checkers rotates its board 90 degrees compared to other checkers variants.
cell_width	Width of board cell. <code>piecepackr::game_systems()</code> supports 1 or 2. If NULL then don't set it yet.

checkers_games_other *Setups for other games playable with a checkers set*

Description

tibble data frames of setups for 7 other games playable with a checkers set. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```

checkers_breakthrough(cell_width = 1)

checkers_crossings(cell_width = 1)

checkers_focus(cell_width = 1)

checkers_four_field_kono(cell_width = 1)

checkers_grasshopper(cell_width = 1)

checkers_julgonu(cell_width = 1)

checkers_lines_of_action(cell_width = 1)

```

Arguments

cell_width Width of board cell. Most renderers support 1 or 2.

Details

Here are links for more information about the various games:

Game	URL
Breakthrough	https://en.wikipedia.org/wiki/Breakthrough_(board_game)
Crossings	https://en.wikipedia.org/wiki/Crossings_(game)
Focus	https://en.wikipedia.org/wiki/Focus_(board_game)
Four Field Kono	https://en.wikipedia.org/wiki/Four_Field_Kono
Grasshopper	http://www.cyclingstan.com/game/71/grasshopper
Jul-Gonu	https://en.wikipedia.org/wiki/Jul-Gonu
Lines of Action	https://en.wikipedia.org/wiki/Lines_of_Action

checkers_games_variant

Setups for checkers variants

Description

tibble data frames of setups for 16 checkers variants. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```
checkers_american_checkers(cell_width = 1)
```

```
checkers_american_pool_checkers(cell_width = 1)
```

```
checkers_brazilian_checkers(cell_width = 1)
```

```
checkers_canadian_checkers(cell_width = 1)
```

```
checkers_checkers(cell_width = 1)
```

```
checkers_czech_checkers(cell_width = 1)
```

```
checkers_dameo(cell_width = 1)
```

```
checkers_english_checkers(cell_width = 1)
```

```
checkers_frisian_checkers(cell_width = 1)
```

```

checkers_gothic_checkers(cell_width = 1)
checkers_international_checkers(cell_width = 1)
checkers_italian_checkers(cell_width = 1)
checkers_jamaican_checkers(cell_width = 1)
checkers_portuguese_checkers(cell_width = 1)
checkers_russian_checkers(cell_width = 1)
checkers_spanish_checkers(cell_width = 1)
checkers_thai_checkers(cell_width = 1)
checkers_turkish_checkers(cell_width = 1)

```

Arguments

`cell_width` Width of board cell. Most renderers support 1 or 2.

Details

Here are links for more information about the various games:

Game

(American) Checkers AKA (English) Draughts
 American Pool Checkers
 Brazilian Checkers AKA Brazilian Draughts
 Canadian Checkers AKA Canadian Draughts
 Czech Checkers AKA Czech Draughts
 Dameo
 Frisian Checkers AKA Frisian Draughts
 Gothic Checkers AKA Gothic Draughts
 International Checkers AKA International Draughts
 Italian Checkers AKA Italian Draughts
 Jamaican Checkers AKA Jamaican Draughts
 Portuguese Checkers AKA Portuguese Draughts
 Russian Checkers AKA Russian Draughts
 Spanish Checkers AKA Spanish Draughts
 Thai Checkers AKA Thai Draughts AKA Mak-hot AKA Makhos
 Turkish Checkers AKA Turkish Draughts AKA Dama

URL

<https://en.wikipedia.org/wiki/Draughts>
<https://draughts.github.io/american-pool-checkers/>
https://en.wikipedia.org/wiki/Brazilian_draughts
https://en.wikipedia.org/wiki/Canadian_checker
https://en.wikipedia.org/wiki/Czech_draughts
<https://en.wikipedia.org/wiki/Dameo>
https://en.wikipedia.org/wiki/Frisian_draughts
<http://mlwi.magix.net/bg/gothiccheckersvariant/>
https://en.wikipedia.org/wiki/International_draughts
https://en.wikipedia.org/wiki/Italian_draughts
<https://web.archive.org/web/20230605023244/http://www.fpdamas.pt/regras/>
<http://www.fpdamas.pt/regras/>
https://en.wikipedia.org/wiki/Russian_draughts
<https://mindsports.nl/index.php/on-the-evolution-of-checkers>
<https://checkers.fandom.com/wiki/Mak-hot>
https://en.wikipedia.org/wiki/Turkish_draughts

chess_games_variant *Setups for chess variants*

Description

tibble data frames of setups for 2 chess variants. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```
chess_chess(cell_width = 1)

chess_chess960(seed = NULL, cell_width = 1)

chess_fischer_random_chess(seed = NULL, cell_width = 1)

chess_international_chess(cell_width = 1)
```

Arguments

`cell_width` Width of board cell. Most renderers support 1 or 2.
`seed` Seed that determines setup, either an integer or NULL

Details

Here are links for more information about the various games:

Game	URL
(International) Chess	https://en.wikipedia.org/wiki/Chess
Fischer Random Chess AKA Chess960	https://www.chessvariants.com/diffsetup.dir/fischer.html

dominoes_games_variant
Setups for dominoes variants

Description

tibble data frames of setups for 1 dominoes variants. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```
dominoes_fujisan(seed = NULL)
```

Arguments

seed Seed that determines setup, either an integer or NULL

Details

Here are links for more information about the various games:

Game	URL
(Domino) Fuji-san	http://donkirkby.github.io/donimoes/rules.html#fujisan

games_info	<i>Data frames with game info</i>
------------	-----------------------------------

Description

games_chess(), games_dominoes(), games_checkers(), games_piecepack(), and games_stackpack() contain information about the games whose setups are provided by this package.

Usage

```
games_chess()
games_checkers()
games_dominoes()
games_piecepack()
games_stackpack()
```

Value

A `tibble::tibble()` data frame with character columns "game", "methods", "comment", and "url" for game name, setup function name(s), possible comment, and url for more information.

Examples

```
head(games_piecepack())
# Number of games for each game system
nrow(games_chess())
nrow(games_checkers())
nrow(games_dominoes())
nrow(games_piecepack())
nrow(games_stackpack())
```

normalize_name	<i>Normalize name(s)</i>
----------------	--------------------------

Description

normalize_name() normalizes (game) name(s).

Usage

```
normalize_name(x, sep = "_")
```

Arguments

x	Name to normalize.
sep	Separator character.

Details

normalize_name(x, sep = "_") is used to help create R variable names while normalize_name(x, sep = "-") is used to help create filenames and LaTeX labels.

Value

Character vector of normalized names.

Examples

```
normalize_name("Fuji-san")
normalize_name("Nine Men's Morris", sep = "-")
```

piecepack_games_checkers

Setups for checkers variants playable with a piecepack

Description

tibble data frames of setups for 12 checkers variants playable with a piecepack. Data frame output can usually be plotted with pmap_piece(df, default.units = "in").

Usage

piecepack_american_checkers()
piecepack_american_pool_checkers()
piecepack_checkers()
piecepack_brazilian_checkers()
piecepack_czech_checkers()
piecepack_english_checkers()
piecepack_gothic_checkers()
piecepack_italian_checkers()
piecepack_jamaican_checkers()
piecepack_portuguese_checkers()
piecepack_russian_checkers()
piecepack_spanish_checkers()
piecepack_thai_checkers()
piecepack_turkish_checkers()

Details

Here are links for more information about the various checkers variants:

Game

(American) Checkers AKA (English) Draughts
American Pool Checkers
Brazilian Checkers AKA Brazilian Draughts
Czech Checkers AKA Czech Draughts
Gothic Checkers AKA Gothic Draughts
Italian Checkers AKA Italian Draughts
Jamaican Checkers AKA Jamaican Draughts
Portuguese Checkers AKA Portuguese Draughts
Russian Checkers AKA Russian Draughts
Spanish Checkers AKA Spanish Draughts
Thai Checkers AKA Thai Draughts AKA Mak-hot AKA Makhos
Turkish Checkers AKA Turkish Draughts AKA Dama

URL

<https://www.ludism.org/ppwiki/Checkers>
<https://draughts.github.io/american-pool-checkers/>
https://en.wikipedia.org/wiki/Brazilian_draughts
https://en.wikipedia.org/wiki/Czech_draughts
<http://mlwi.magix.net/bg/gothiccheckersvariant/>
https://en.wikipedia.org/wiki/Italian_draughts
<https://web.archive.org/web/20230605023244/http://www.fpdamas.pt/regras/>
https://en.wikipedia.org/wiki/Russian_draughts
<https://mindsports.nl/index.php/on-the-evolution-of-checkers/>
<https://checkers.fandom.com/wiki/Mak-hot>
https://en.wikipedia.org/wiki/Turkish_draughts

piecepack_games_chess *Setups for chess variants playable with a piecepack*

Description

tibble data frames of setups for 8 chess variants playable with a piecepack. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```
piecepack_alice_chess(has_subpack = FALSE, max_tiles = 24L)
piecepack_baroque_chess(has_subpack = FALSE)
piecepack_chaturaji(has_subpack = FALSE)
piecepack_chess(has_subpack = FALSE)
piecepack_chinese_chess(has_subpack = FALSE)
piecepack_four_seasons_chess(has_subpack = FALSE)
piecepack_international_chess(has_subpack = FALSE)
piecepack_japanese_chess(has_subpack = FALSE, cfg2 = "piecepack")
piecepack_minishogi()
piecepack_shogi(has_subpack = FALSE, cfg2 = "piecepack")
piecepack_ultima(has_subpack = FALSE)
piecepack_xiangqi(has_subpack = FALSE)
```

Arguments

<code>has_subpack</code>	Has a piecepack subpack
<code>max_tiles</code>	Maximum number of (piecepack) tiles available to build boards
<code>cfg2</code>	A string of a piecepack expansion (or perhaps "piecepack" for a second piecepack)

Details

Here are links for more information about the various chess variants:

Game	URL
Alice Chess	https://en.wikipedia.org/wiki/Alice_chess

Chaturaji	https://www.ludism.org/ppwiki/Chaturaji
Four Seasons Chess	https://www.chessvariants.com/historic.dir/4seiz.html
(International) Chess	https://www.ludism.org/ppwiki/Chess
Minishogi	https://en.wikipedia.org/wiki/Minishogi
Shogi AKA Japanese Chess	https://www.ludism.org/ppwiki/Shogi
Ultima AKA Baroque Chess	https://en.wikipedia.org/wiki/Baroque_chess
Xiangqi AKA Chinese Chess	https://www.ludism.org/ppwiki/Xiangqi

piecepack_games_original

Setups for various piecepack games

Description

tibble data frames of setups for 49 games playable with a piecepack. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

`piecepack_alien_city(seed = NULL, tiles = NULL)`

`piecepack_black_pawn_trucking(seed = NULL)`

`piecepack_brain_burn(seed = NULL)`

`piecepack_burbuja(seed = NULL, tiles = NULL)`

`piecepack_cardinals_guards(seed = NULL, tiles = NULL)`

`piecepack_cell_management(seed = NULL)`

`piecepack_chariots()`

`piecepack_chinese_checkers()`

`piecepack_piecepack_halma()`

`piecepack_coin_collectors(seed = NULL, tiles = NULL, coins = NULL, dice = NULL)`

`piecepack_climbing_man(seed = NULL, variant = c("Basic", "Free"))`

`piecepack_crocodile_hop(seed = NULL)`

`piecepack_desfases(seed = NULL, tiles = NULL, dice = NULL)`

```
piecepack_easy_slider(seed = NULL, tiles = NULL, coins = NULL, pawns = NULL)
piecepack_everest()
piecepack_four_blind_mice()
piecepack_froggy_bottom()
piecepack_fujisan(seed = NULL, coins = NULL, dice = NULL)
piecepack_galaxy_express(seed = NULL)
piecepack_iceberg(seed = NULL, tiles = NULL)
piecepack_ice_floe()
piecepack_japan(seed = NULL)
piecepack_lab_rats(seed = NULL)
piecepack_landlocked(seed = NULL)
piecepack_ley_lines()
piecepack_mathrix(seed = NULL, coins = NULL)
piecepack_piecepackman(seed = NULL, variant = "Roundabout")
piecepack_one_man_thrag(seed = NULL)
piecepack_pass_the_food()
piecepack_piecepack_klondike(seed = NULL)
piecepack_piece_gaps(seed = NULL)
piecepack_piece_packing_pirates(seed = NULL)
piecepack_plans_of_action(seed = NULL, coins = NULL)
piecepack_relativity(seed = NULL, coins = NULL)
piecepack_san_andreas()
piecepack_sarcophagus(seed = NULL)
piecepack_shopping_mall(seed = NULL, cfg2 = "go")
```

```

piecepack_skyscrapers(seed = NULL, tiles = NULL)

piecepack_slides_of_action()

piecepack_speedy_towers(n_players = 2, seed = NULL)

piecepack_steppin_stones(seed = NULL)

piecepack_the_in_crowd()

piecepack_the_magic_bag(seed = NULL)

piecepack_the_penguin_game(seed = NULL)

piecepack_tower_of_babel(seed = NULL, tiles = NULL)

piecepack_tracers()

piecepack_triactor(seed = NULL, cfg2 = "playing_cards_expansion")

piecepack_tula(
  seed = NULL,
  tiles = NULL,
  variant = c("Original", "Variant 1", "Variant 2", "Variant 3", "Variant 4")
)

piecepack_wormholes()

```

Arguments

seed	Seed that determines setup, either an integer or NULL
tiles	String of tile layout
coins	String of coin layout
dice	String of dice layout
variant	Name of variant
pawns	String of pawns layout
cfg2	A string of a piecepack expansion (or perhaps "piecepack" for a second piecepack)
n_players	Number of players

Details

Here are links for more information about the various games:

Game	URL
Alien City	https://www.ludism.org/ppwiki/AlienCity
Black Pawn Trucking	https://www.ludism.org/ppwiki/BlackPawnTrucking
Brain Burn	https://www.ludism.org/ppwiki/BrainBurn

Burbuja	https://www.ludism.org/ppwiki/Burbuja
Cardinal's Guards	https://ludism.org/ppwiki/CardinalsGuards
Cell Management	https://www.ludism.org/ppwiki/CellManagement
Chariots	https://www.ludism.org/ppwiki/Chariots
Chinese Checkers AKA Piecepack Halma	https://www.ludism.org/ppwiki/ChineseCheckers
Climbing Man	https://www.ludism.org/ppwiki/ClimbingMan
Coin Collectors	https://www.ludism.org/ppwiki/CoinCollectors
Crocodile Hop	https://www.ludism.org/ppwiki/CrocodileHop
Desfases	https://www.ludism.org/ppwiki/Desfases
Easy Slider	https://www.ludism.org/ppwiki/EasySlider
Everest	https://www.ludism.org/ppwiki/Everest
Four Blind Mice	https://www.ludism.org/ppwiki/FourBlindMice
Froggy Bottom	https://www.ludism.org/ppwiki/FroggyBottom
Fuji-san	https://www.ludism.org/ppwiki/Fuji-san
Galaxy Express	https://www.ludism.org/ppwiki/GalaxyExpress
Ice Floe	https://www.ludism.org/ppwiki/IceFloe
Iceberg	https://www.ludism.org/ppwiki/Iceberg
Japan	https://www.ludism.org/ppwiki/Japan
Lab Rats	https://www.ludism.org/ppwiki/LabRats
Landlocked	https://www.ludism.org/ppwiki/Landlocked
Ley Lines	https://www.ludism.org/ppwiki/LeyLines
Mathrix	https://www.ludism.org/ppwiki/Mathrix
One Man Thrag!	https://www.ludism.org/ppwiki/OneManThrag
Pass the Food	https://www.ludism.org/ppwiki/PassTheFood
Piece Gaps	https://www.ludism.org/ppwiki/PieceGaps
Piece Packing Pirates	https://www.ludism.org/ppwiki/PiecePackingPirates
Piecepack Klondike	https://ludism.org/ppwiki/PiecepackKlondike
Piecepackman	https://www.ludism.org/ppwiki/Piecepackman
Plans of Action	https://www.ludism.org/ppwiki/PlansOfAction
Relativity	https://www.ludism.org/ppwiki/Relativity
San Andreas	https://www.ludism.org/ppwiki/SanAndreas
Sarcophagus	https://www.ludism.org/ppwiki/Sarcophagus
Shopping Mall	https://www.ludism.org/ppwiki/ShoppingMall
Skyscrapers	https://www.ludism.org/ppwiki/Skyscrapers
Slides of Action	https://www.ludism.org/ppwiki/SlidesOfAction
Speedy Towers	https://ludism.org/ppwiki/SpeedyTowers
Steppin' Stones	https://ludism.org/ppwiki/Steppin'_Stones
The "In" Crowd	https://www.ludism.org/ppwiki/TheInCrowd
The Magic Bag	https://www.ludism.org/ppwiki/The_Magic_Bag
The Penguin Game	https://www.ludism.org/ppwiki/PenguinGame
Tower of Babel	https://www.ludism.org/ppwiki/TowerOfBabel
Tracers	https://www.ludism.org/ppwiki/Tracers
Triactor	https://www.ludism.org/ppwiki/Triactor
Tula	https://www.ludism.org/ppwiki/Tula
Twelve Men's Morris	https://en.wikipedia.org/wiki/Morabaraba
Wormholes	https://www.ludism.org/ppwiki/Wormholes

piecepack_games_other *Setups for other modern games playable with a piecepack*

Description

tibble data frames of setups for 7 other games playable with a piecepack. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```
piecepack_breakthrough()
```

```
piecepack_change_change(seed = NULL, coins = NULL)
```

```
piecepack_crossings()
```

```
piecepack_evade()
```

```
piecepack_grasshopper()
```

```
piecepack_lines_of_action()
```

```
piecepack_quatri()
```

Arguments

seed	Seed that determines setup, either an integer or NULL
coins	String of coin layout

Details

Here are links for more information about the various other games:

Game	URL
Breakthrough	https://en.wikipedia.org/wiki/Breakthrough_(board_game)
Crossings	https://en.wikipedia.org/wiki/Crossings_(game)
Change Change	https://www.ludism.org/ppwiki/ChangeChange
Grasshopper	http://www.cynningstan.com/game/71/grasshopper
Evade	https://www.ludism.org/ppwiki/Evade
Lines of Action	https://en.wikipedia.org/wiki/Lines_of_Action
Quatri	https://www.ludism.org/ppwiki/Quatri

`piecepack_games_traditional`*Setups for other traditional games playable with a piecepack*

Description

tibble data frames of setups for 11 other traditional games playable with a piecepack. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```
piecepack_alquerque(has_matchsticks = FALSE)
piecepack_awithlaknannai_mosona(has_matchsticks = FALSE)
piecepack_backgammon()
piecepack_brandubh()
piecepack_cribbage()
piecepack_cribbage_board()
piecepack_four_field_kono()
piecepack_julgonu()
piecepack_ludo()
piecepack_nine_mens_morris(has_matchsticks = FALSE)
piecepack_salta(has_subpack = FALSE)
piecepack_tablut(die_width = 0.63)
piecepack_twelve_mens_morris(has_matchsticks = FALSE)
```

Arguments

<code>has_matchsticks</code>	Has matchsticks
<code>has_subpack</code>	Has a piecepack subpack
<code>die_width</code>	Width of dice

Details

Here are links for more information about the various other traditional games:

Game	URL
Alquerque AKA Qirkat	https://en.wikipedia.org/wiki/Alquerque
Awithlakkannai Mosona	https://en.wikipedia.org/wiki/Awithlakkannai_Mosona
Backgammon	https://www.ludism.org/ppwiki/Backgammon
Brandubh AKA Brandub	http://www.cynningstan.com/game/125/brandub
Cribbage	https://www.ludism.org/ppwiki/Cribbage
Four Field Kono	https://www.ludism.org/ppwiki/FourFieldKono
Jul-Gonu	https://www.ludism.org/ppwiki/JulGonu
Ludo	https://en.wikipedia.org/wiki/Ludo_(board_game)
Nine Men's Morris	https://en.wikipedia.org/wiki/Nine_men%27s_morris
Salta	https://en.wikipedia.org/wiki/Salta_(game)
Tablut	https://www.ludism.org/ppwiki/Tablut

piecepack_rect_board_tiles

Setup various game boards using piecepack tiles

Description

`df_rect_board_tiles` returns a tibble data_frame of a rectangular board of desired size made using a maximum number of piecepack tiles. It will use either “cells”, “points”, and/or “rivers” as necessary.

Usage

```
piecepack_rect_board_tiles(
  nrows = 8,
  ncols = 8,
  x0 = 1,
  y0 = 1,
  max_tiles = 24,
  suit = rep(1:4, 6),
  rank = rep(1:6, each = 4)
)
```

Arguments

<code>nrows</code>	Number of rows in game board
<code>ncols</code>	Number of columns in game board
<code>x0</code>	X coordinate for the center of the first cell/point
<code>y0</code>	Y coordinate for the center of the first cell/point

max_tiles	Maximum number of tiles that can be used
suit	Vector of suit values to use for tile back (will be repeated).
rank	Vector of rank values to use for tile back (will be repeated).

setup_by_name	<i>Setups by game name</i>
---------------	----------------------------

Description

setup_by_name() returns setup data frames by game name and game system. checkers_by_name(), chess_by_name(), dominoes_by_name(), and piecepack_by_name() are aliases that set the game system.

Usage

```
setup_by_name(
  name,
  system = known_game_systems,
  ...,
  getter = function(x) get(x, envir = getNamespace("ppdf"))
)
```

```
checkers_by_name(
  name,
  ...,
  getter = function(x) get(x, envir = getNamespace("ppdf"))
)
```

```
chess_by_name(
  name,
  ...,
  getter = function(x) get(x, envir = getNamespace("ppdf"))
)
```

```
dominoes_by_name(
  name,
  ...,
  getter = function(x) get(x, envir = getNamespace("ppdf"))
)
```

```
piecepack_by_name(
  name,
  ...,
  getter = function(x) get(x, envir = getNamespace("ppdf"))
)
```

```

stackpack_by_name(
  name,
  ...,
  getter = function(x) get(x, envir = getNamespace("ppdf"))
)

```

Arguments

name	Game name. Will be normalized by normalize_name() .
system	Game system.
...	Additional arguments to pass to the underlying setup function.
getter	Function with a single function name argument to use. By default will just look for packages in this package but a developer may want to consider dynGet() or a wrapper around get() with a custom <code>envir</code> argument.

setup_none	<i>Zero-row data frames</i>
------------	-----------------------------

Description

`checkers_none()`, `chess_none()`, `dominoes_none()`, `piecepack_none()`, and `stackpack_none()` return zero-row data frames.

Usage

```

checkers_none()

chess_none()

dominoes_none()

piecepack_none()

stackpack_none()

```

Value

A data frame with zero rows.

Examples

```
checkers_none()
```

stackpack_games	<i>Setups for games playable with a piecepack stackpack</i>
-----------------	---

Description

tibble data frames of setups for 8 other games playable with a piecepack stackpack. Data frame output can usually be plotted with `pmap_piece(df, default.units = "in")`.

Usage

```
stackpack_alice_chess(max_tiles = 24L)
```

```
stackpack_baroque_chess()
```

```
stackpack_chaturaji()
```

```
stackpack_chess()
```

```
stackpack_chinese_chess()
```

```
stackpack_four_seasons_chess()
```

```
stackpack_international_chess()
```

```
stackpack_japanese_chess()
```

```
stackpack_salta()
```

```
stackpack_shogi()
```

```
stackpack_ultima()
```

```
stackpack_xiangqi()
```

Arguments

<code>max_tiles</code>	Maximum number of (piecepack) tiles available to build boards
------------------------	---

Details

Here are links for more information about the games:

Game	URL
Alice Chess	https://en.wikipedia.org/wiki/Alice_chess
Chaturaji	https://www.ludism.org/ppwiki/Chaturaji
Four Seasons Chess	https://www.chessvariants.com/historic.dir/4seiz.html
(International) Chess	https://www.ludism.org/ppwiki/Chess

Salta	https://en.wikipedia.org/wiki/Salta_(game)
Shogi aka Japanese Chess	https://www.ludism.org/ppwiki/Shogi
Ultima aka Baroque Chess	https://en.wikipedia.org/wiki/Baroque_chess
Xiangqi AKA Chinese Chess	https://www.ludism.org/ppwiki/Xiangqi

Index

checkers_american_checkers
 (checkers_games_variant), 4
checkers_american_pool_checkers
 (checkers_games_variant), 4
checkers_board, 2
checkers_brazilian_checkers
 (checkers_games_variant), 4
checkers_breakthrough
 (checkers_games_other), 3
checkers_by_name (setup_by_name), 18
checkers_canadian_checkers
 (checkers_games_variant), 4
checkers_checkers
 (checkers_games_variant), 4
checkers_crossings
 (checkers_games_other), 3
checkers_czech_checkers
 (checkers_games_variant), 4
checkers_dameo
 (checkers_games_variant), 4
checkers_english_checkers
 (checkers_games_variant), 4
checkers_focus (checkers_games_other), 3
checkers_four_field_kono
 (checkers_games_other), 3
checkers_frisian_checkers
 (checkers_games_variant), 4
checkers_games_other, 3
checkers_games_variant, 4
checkers_gothic_checkers
 (checkers_games_variant), 4
checkers_grasshopper
 (checkers_games_other), 3
checkers_international_checkers
 (checkers_games_variant), 4
checkers_italian_checkers
 (checkers_games_variant), 4
checkers_jamaican_checkers
 (checkers_games_variant), 4
checkers_julgonu
 (checkers_games_other), 3
checkers_lines_of_action
 (checkers_games_other), 3
checkers_none (setup_none), 19
checkers_portuguese_checkers
 (checkers_games_variant), 4
checkers_russian_checkers
 (checkers_games_variant), 4
checkers_spanish_checkers
 (checkers_games_variant), 4
checkers_thai_checkers
 (checkers_games_variant), 4
checkers_turkish_checkers
 (checkers_games_variant), 4
chess_board (checkers_board), 2
chess_by_name (setup_by_name), 18
chess_chess (chess_games_variant), 6
chess_chess960 (chess_games_variant), 6
chess_fischer_random_chess
 (chess_games_variant), 6
chess_games_variant, 6
chess_international_chess
 (chess_games_variant), 6
chess_none (setup_none), 19
dominoes_by_name (setup_by_name), 18
dominoes_fujisan
 (dominoes_games_variant), 6
dominoes_games_variant, 6
dominoes_none (setup_none), 19
dynGet(), 19
games_checkers (games_info), 7
games_chess (games_info), 7
games_dominoes (games_info), 7
games_info, 7
games_piecepack (games_info), 7
games_stackpack (games_info), 7
get(), 19

- normalize_name, 8
- normalize_name(), 19
- piecepack_alice_chess
 - (piecepack_games_chess), 10
- piecepack_alien_city
 - (piecepack_games_original), 11
- piecepack_alquerque
 - (piecepack_games_traditional), 16
- piecepack_american_checkers
 - (piecepack_games_checkers), 8
- piecepack_american_pool_checkers
 - (piecepack_games_checkers), 8
- piecepack_awithlaknannai_mosona
 - (piecepack_games_traditional), 16
- piecepack_backgammon
 - (piecepack_games_traditional), 16
- piecepack_baroque_chess
 - (piecepack_games_chess), 10
- piecepack_black_pawn_trucking
 - (piecepack_games_original), 11
- piecepack_brain_burn
 - (piecepack_games_original), 11
- piecepack_brandubh
 - (piecepack_games_traditional), 16
- piecepack_brazilian_checkers
 - (piecepack_games_checkers), 8
- piecepack_breakthrough
 - (piecepack_games_other), 15
- piecepack_burbuja
 - (piecepack_games_original), 11
- piecepack_by_name (setup_by_name), 18
- piecepack_cardinals_guards
 - (piecepack_games_original), 11
- piecepack_cell_management
 - (piecepack_games_original), 11
- piecepack_change_change
 - (piecepack_games_other), 15
- piecepack_chariots
 - (piecepack_games_original), 11
- piecepack_chaturaji
 - (piecepack_games_chess), 10
- piecepack_checkers
 - (piecepack_games_checkers), 8
- piecepack_chess
 - (piecepack_games_chess), 10
- piecepack_chinese_checkers
 - (piecepack_games_original), 11
- piecepack_chinese_chess
 - (piecepack_games_chess), 10
- piecepack_climbing_man
 - (piecepack_games_original), 11
- piecepack_coin_collectors
 - (piecepack_games_original), 11
- piecepack_cribbage
 - (piecepack_games_traditional), 16
- piecepack_cribbage_board
 - (piecepack_games_traditional), 16
- piecepack_crocodile_hop
 - (piecepack_games_original), 11
- piecepack_crossings
 - (piecepack_games_other), 15
- piecepack_czech_checkers
 - (piecepack_games_checkers), 8
- piecepack_desfases
 - (piecepack_games_original), 11
- piecepack_easy_slider
 - (piecepack_games_original), 11
- piecepack_english_checkers
 - (piecepack_games_checkers), 8
- piecepack_evade
 - (piecepack_games_other), 15
- piecepack_everest
 - (piecepack_games_original), 11
- piecepack_four_blind_mice
 - (piecepack_games_original), 11
- piecepack_four_field_kono
 - (piecepack_games_traditional), 16
- piecepack_four_seasons_chess
 - (piecepack_games_chess), 10
- piecepack_froggy_bottom
 - (piecepack_games_original), 11
- piecepack_fujisan
 - (piecepack_games_original), 11
- piecepack_galaxy_express
 - (piecepack_games_original), 11
- piecepack_games_checkers, 8
- piecepack_games_chess, 10
- piecepack_games_original, 11

- piecepack_games_other, 15
- piecepack_games_traditional, 16
- piecepack_gothic_checkers
 - (piecepack_games_checkers), 8
- piecepack_grasshopper
 - (piecepack_games_other), 15
- piecepack_ice_floe
 - (piecepack_games_original), 11
- piecepack_iceberg
 - (piecepack_games_original), 11
- piecepack_international_chess
 - (piecepack_games_chess), 10
- piecepack_italian_checkers
 - (piecepack_games_checkers), 8
- piecepack_jamaican_checkers
 - (piecepack_games_checkers), 8
- piecepack_japan
 - (piecepack_games_original), 11
- piecepack_japanese_chess
 - (piecepack_games_chess), 10
- piecepack_julgonu
 - (piecepack_games_traditional), 16
- piecepack_lab_rats
 - (piecepack_games_original), 11
- piecepack_landlocked
 - (piecepack_games_original), 11
- piecepack_ley_lines
 - (piecepack_games_original), 11
- piecepack_lines_of_action
 - (piecepack_games_other), 15
- piecepack_ludo
 - (piecepack_games_traditional), 16
- piecepack_mathrix
 - (piecepack_games_original), 11
- piecepack_minishogi
 - (piecepack_games_chess), 10
- piecepack_nine_mens_morris
 - (piecepack_games_traditional), 16
- piecepack_none (setup_none), 19
- piecepack_one_man_thrag
 - (piecepack_games_original), 11
- piecepack_pass_the_food
 - (piecepack_games_original), 11
- piecepack_piece_gaps
 - (piecepack_games_original), 11
- piecepack_piece_packing_pirates
 - (piecepack_games_original), 11
- piecepack_piecepack_halma
 - (piecepack_games_original), 11
- piecepack_piecepack_klondike
 - (piecepack_games_original), 11
- piecepack_piecepackman
 - (piecepack_games_original), 11
- piecepack_plans_of_action
 - (piecepack_games_original), 11
- piecepack_portuguese_checkers
 - (piecepack_games_checkers), 8
- piecepack_quatri
 - (piecepack_games_other), 15
- piecepack_rect_board_tiles, 17
- piecepack_relativity
 - (piecepack_games_original), 11
- piecepack_russian_checkers
 - (piecepack_games_checkers), 8
- piecepack_salta
 - (piecepack_games_traditional), 16
- piecepack_san_andreas
 - (piecepack_games_original), 11
- piecepack_sarcophagus
 - (piecepack_games_original), 11
- piecepack_shogi
 - (piecepack_games_chess), 10
- piecepack_shopping_mall
 - (piecepack_games_original), 11
- piecepack_skyscrapers
 - (piecepack_games_original), 11
- piecepack_slides_of_action
 - (piecepack_games_original), 11
- piecepack_spanish_checkers
 - (piecepack_games_checkers), 8
- piecepack_speedy_towers
 - (piecepack_games_original), 11
- piecepack_steppin_stones
 - (piecepack_games_original), 11
- piecepack_tablut
 - (piecepack_games_traditional), 16
- piecepack_thai_checkers
 - (piecepack_games_checkers), 8
- piecepack_the_in_crowd
 - (piecepack_games_original), 11
- piecepack_the_magic_bag

(piecepack_games_original), 11
piecepack_the_penguin_game
 (piecepack_games_original), 11
piecepack_tower_of_babel
 (piecepack_games_original), 11
piecepack_tracers
 (piecepack_games_original), 11
piecepack_triactor
 (piecepack_games_original), 11
piecepack_tula
 (piecepack_games_original), 11
piecepack_turkish_checkers
 (piecepack_games_checkers), 8
piecepack_twelve_mens_morris
 (piecepack_games_traditional),
 16
piecepack_ultima
 (piecepack_games_chess), 10
piecepack_wormholes
 (piecepack_games_original), 11
piecepack_xiangqi
 (piecepack_games_chess), 10
piecepackr::game_systems(), 3

setup_by_name, 18
setup_none, 19
stackpack_alice_chess
 (stackpack_games), 20
stackpack_baroque_chess
 (stackpack_games), 20
stackpack_by_name (setup_by_name), 18
stackpack_chaturaji (stackpack_games),
 20
stackpack_chess (stackpack_games), 20
stackpack_chinese_chess
 (stackpack_games), 20
stackpack_four_seasons_chess
 (stackpack_games), 20
stackpack_games, 20
stackpack_international_chess
 (stackpack_games), 20
stackpack_japanese_chess
 (stackpack_games), 20
stackpack_none (setup_none), 19
stackpack_salta (stackpack_games), 20
stackpack_shogi (stackpack_games), 20
stackpack_ultima (stackpack_games), 20
stackpack_xiangqi (stackpack_games), 20
tibble::tibble(), 7