Package ‘rchess’

October 14, 2022

Version 0.1

Title Chess Move, Generation/Validation, Piece Placement/Movement, and Check/Checkmate/Stalemate Detection

Description R package for chess validations, pieces movements and check detection. Also integrates functions to plot chess boards given a Forsyth Edwards and Portable Game notations.

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URL https://github.com/jbkunst/rchess

BugReports https://github.com/jbkunst/rchess/issues

Imports htmlwidgets, V8, R6, ggplot2, plyr, dplyr, assertthat

RoxygenNote 5.0.0

NeedsCompilation no

Repository CRAN

Date/Publication 2015-11-05 17:18:05

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Chess  

Chess Class

Description
Chess class.

Usage
Chess

Format
Class 'R6ClassGenerator' <environment: 0x03cdd80c>
  - attr(*, "name")= chr "Chess_generator"

chessboardjs  

Plot a chessboard via chessboardjs

Description
Function to show the fen string in a chessboard widget.

Usage
chessboardjs(fen = "rnbqkbnr/pppppppp/8/8/8/8/PPPPPPPP/RNBQKBNR w KQkq - 0 1",
width = 300, height = 300)

Arguments
- fen  
  Fen notation of a chessboard
- width  
  Width in pixels
- height  
  Height in pixels

Value
The chessboardjs board

Examples
chessboardjs()
chessboardjsOutput

Widget output function for use in Shiny

**Description**

Widget output function for use in Shiny

**Usage**

chessboardjsOutput(outputId, width = "100\%", height = "400px")

**Arguments**

- outputId: Id of the div tag
- width: Width in pixels
- height: Height in pixels

chessopenings

*Chess openings data*

**Description**

This data comes from the chess Chess Opening Theory wikibook [https://en.wikibooks.org/wiki/Chess_Opening_Theory](https://en.wikibooks.org/wiki/Chess_Opening_Theory). The opening were parse using rvest package.

**Usage**

chessopenings

**Format**

A data frame with 544 observations and 3 variables.

**Links**

Variables

- eco: The game’s opening classification
- name: Game’s location
- pgn: The game’s pgn

Examples

data(chessopenings)
library("dplyr")
head(chessopenings)

Description

This data comes from the http://www.theweekinchess.com/ site and represent 1,266 games in the FIDE World Cupo 11, 13 & 15. The data has been parsed from the downloaded pgn files using https://github.com/jbkunst/chess-db scripts.

Usage

chesswc

Format

A data frame with 1,266 observations and 11 variables.

Links


Variables

- event: Game’s event
- site: Game’s location
- date: Game’s date
- round: Game’s round
- white: White player’s name
- black: Black player’s name
- result: Game’s result
- whiteelo: White player’s elo rating
- blackelo: Black player’s elo rating
- eco: The game’s opening classification
- pgn: The game’s pgn
ggchessboard

Examples

data(chesswc)
library("dplyr")
count(chesswc, event)

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ggchessboard

Plot a fen representation chessboard via ggplot2

Description

Function to show the fen string in ggplot2.

Usage

ggchessboard(fen = "rnbqkbnr/pppppppp/8/8/8/8/PPPPPPPP/RNBQKBNR w KQkq - 0 1",
cellcols = c("#D2B48C", "#F5F5DC"), perspective = "white",
piecesize = 15)

Arguments

fen
Fen notation of a chessboard

cellcols
A 2 length vector for the cell colors

perspective
A string to show the perspective (black, white)

piecesize
Size of the the unicode texts

Value

A ggplot object

Examples

ggchessboard()

ggchessboard(fen = "rnbqkbnr/pp1ppppp/8/2p5/4P3/8/PPPP1PPP/RNBQKBNR w KQkq c6 0 2")

ggchessboard(fen = "rnbqkbnr/pp1ppppp/8/2p5/4P3/8/PPPP1PPP/RNBQKBNR w KQkq c6 0 2",
cellcols = c("#CCCCCC", "#FAFAFA"),
piecesize = 17,
perspective = "black")
**rchest**

*Package for chess move, generation/validation, piece placement/movement, and check/checkmate/stalemate detection*

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**renderChessboardjs**

*Widget render function for use in Shiny*

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**Description**

Package for chess move, generation/validation, piece placement/movement, and check/checkmate/stalemate detection

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**Usage**

`renderChessboardjs(expr, env = parent.frame(), quoted = FALSE)`

**Arguments**

- `expr`: Expression
- `env`: Environment
- `quoted`: Quoted
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