Package 'squashinformr'

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Title Politely Web Scrape Data from SquashInfo

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Description Scrape SquashInfo <http://www.squashinfo.com/> for data on the Professional Squash Association World Tour and other squash events. 'squashinformr' functions scrape, parse, and clean data associated with players, tournaments, and rankings.

Depends R (>= 3.5.0)

Imports dplyr (>= 0.8.5), plyr (>= 1.8.6), tibble (>= 2.1.3), lubridate (>= 1.7.4), stringr (>= 1.4.0), tidyr (>= 1.0.2), rvest (>= 0.3.3), xml2 (>= 1.2.5), polite (>= 0.1.1), naniar (>= 0.5.0), janitor (>= 1.2.0), Hmisc (>= 4.4-0), rlang (>= 0.4.5)

Suggests testthat, covr, knitr, rmarkdown

License GPL-3

Encoding UTF-8

LazyData true

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BugReports https://github.com/HaydenMacDonald/squashinformr/issues RoxygenNote 7.1.0 NeedsCompilation no Repository CRAN Date/Publication 2020-05-01 18:30:02 UTC

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get_historical_rankings

Get historical PSA rankings from SquashInfo

Description

Given a year, abbreviated month, competition category, and number of top players, get_historical_rankings() returns the corresponding historical PSA rankings table.

Usage

```
get_historical_rankings(year = NULL, month = NULL, category = NULL, top = NULL)
```

Arguments

year	integer indicating the ranking year
month	three letter abbreviation of ranking month
category	character string indicating the competition category. Must be one of "both", "mens", or "womens".
top	integer indicating the number of top PSA players by rank to return.

Value

Tibble containing the ranking year, ranking month, exact date, rank, player name, and player current rank.

Note

This function takes substantial time to scrape the corresponding data because historical ranking tables are not available to non-premium members on SquashInfo. The historical rankings returned by this function are reverse-engineered from individual player ranking histories.

References

http://www.squashinfo.com/players

get_matchup

Examples

```
## Who were the top 10 players in both men's and women's singles in January 2019?
top10 <- get_historical_rankings(2019, "Jan", "both", 10)</pre>
```

get_matchup

Get a player matchup data from SquashInfo

Description

Given the full names or ranks of players, and the competition category, get_matchup() returns recent matchup data for PSA ranked players.

Usage

```
get_matchup(
   player_1 = NULL,
   player_2 = NULL,
   ranks = NULL,
   category = NULL,
   tidy = FALSE,
   match_spread = FALSE
)
```

Arguments

player_1	character string of the first player's name.
player_2	character string of the second player's name.
ranks	integers indicating the rank of the PSA players to return.
category	character string indicating the competition category. Must be one of "mens" or "womens".
tidy	logical indicating whether to organize results according to tidy principles.
match_spread	logical indicating whether to only return match spread statistics.

Value

Tibble containing each player's rank, name, total matches played, number of matches won, the match results spread (relative to player 1), the average match time, the number of games played, the number of games won, average point advantage in a won game, the average point difference in final scores, the number of tie-break wins, and the percentage of games that go to a tie-breaker.

Note

This function only returns data from players ranked in the most recent PSA rankings table for Men's and Women's singles competitions.

References

```
http://www.squashinfo.com/rankings/men
http://www.squashinfo.com/rankings/women
```

Examples

Get tidy matchup data for Mohamed Elshorbagy vs Ali Farag
get_matchup(player_1 = "Mohamed Elshorbagy", player_2 = "Ali Farag", category = "mens", tidy = TRUE)

Get non-tidy matchup data for Raneem El Welily vs Nouran Gohar
get_matchup("Raneem El Welily", "Nouran Gohar", category = "womens", tidy = FALSE)

```
## Get tidy match spread data for Paul Coll and Diego Elias
get_matchup("Paul Coll", "Diego Elias", category = "mens", tidy = TRUE, match_spread = TRUE)
```

```
get_players
```

Get PSA Squash Player Data from SquashInfo

Description

Given the rank(s) and competition category, get_players() returns profile data of ranked players in PSA World Tour competitions.

Usage

get_players(top = NULL, rank = NULL, category = NULL)

Arguments

top	integer indicating the number of top PSA players by rank to return.
rank	integer indicating the rank of the PSA player(s) to return.
category	character string indicating the competition category. Must be one of "both" "mens", or "womens".

Value

Tibble containing first name, last name, age, gender, birthplace, nationality, residence, height in cm, weight in kg, plays (handedness), racket brand, year of joining PSA, university, and club.

Note

This function only returns players ranked in the most recent PSA rankings table for Men's and Women's singles competitions.

References

```
http://www.squashinfo.com/rankings/men
http://www.squashinfo.com/rankings/women
```

Examples

```
## Return the top 5 ranked players from PSA Women's PSA rankings
get_players(top = 5, category = "womens")
```

```
## Return the 5th ranked player from both Men's and Women's PSA rankings
get_players(rank = 5, category = "both")
```

Description

Given a player name or rank, and a competition category, get_player_rankings_history() returns a tidy version of the PSA rankings history table for that player(s).

Usage

```
get_player_rankings_history(player = NULL, rank = NULL, category = NULL)
```

Arguments

player	character string of player name(s).
rank	integer indicating the rank of the PSA player(s) to return.
category	character string indicating the competition category. Must be one of "both", "mens", or "womens".

Value

Tibble containing the year, month, exact date, rank, player name and player's current rank.

Note

This function only returns PSA ranking histories for players currently ranked in PSA Men's and Women's singles competitions.

References

```
## Get the rankings history for the top two men's singles players
top_two <- get_player_rankings_history(rank = 1:2, category = "mens")</pre>
```

```
## Get the rankings history for the top three women's singles players
top_three <- get_player_rankings_history(rank = 1:3, category = "womens")</pre>
```

get_player_recent_games

Get a player's recent games from SquashInfo

Description

Given the full name or rank of a player and the competition category, get_player_recent_games() returns recent game data for PSA ranked players.

Usage

```
get_player_recent_games(player = NULL, rank = NULL, category = NULL)
```

Arguments

player	character string of player name.
rank	single integer or vector of integers indicating the rank of the PSA player(s) to return.
category	character string indicating the competition category. Must be one of "both", "mens", or "womens".

Value

Tibble containing the player rank, name, opponent, points won, points lost, game result, tournament round, event, PSA designation, and event location.

Note

This function only returns data from players ranked in the most recent PSA rankings table for Men's and Women's singles competitions.

References

```
## Get Mohamed Elshorbagy's most recent game data
get_player_recent_games(player = "Mohamed Elshorbagy", category = "mens")
```

```
## Get Nour El Tayeb's recent game data
get_player_recent_games("El Tayeb", category = "womens")
```

Get recent game data from the top two players in both Men's and Women's competitions get_player_recent_games(rank = 1:2, category = "both")

```
get_player_recent_matches
```

Get a player's recent matches from SquashInfo

Description

Given the full name or rank of a player and the competition category, get_player_recent_matches() returns recent match data for PSA ranked players.

Usage

```
get_player_recent_matches(player = NULL, rank = NULL, category = NULL)
```

Arguments

player	character string of player name.
rank	single integer or vector of integers indicating the rank of the PSA player(s) to return.
category	character string indicating the competition category. Must be one of "both", "mens", or "womens".

Value

Tibble containing the player rank, name, opponent, match result, games won, games lost, match time, date, tournament round, event, PSA designation, and event location.

Note

This function only returns data from players ranked in the most recent PSA rankings table for Men's and Women's singles competitions.

References

```
## Get Mohamed Elshorbagy's most recent match data
get_player_recent_matches(player = "Mohamed Elshorbagy", category = "mens")
## Get Nour El Tayeb's recent match data
get_player_recent_matches("El Tayeb", category = "womens")
```

Get recent match data from the top two players in both Men's and Women's competitions get_player_recent_matches(rank = 1:2, category = "both")

```
get_player_recent_results
```

Get a player's recent event results from SquashInfo

Description

Given the full name or rank of a player and the competition category, get_player_recent_results() returns the recent event results table for PSA ranked players.

Usage

```
get_player_recent_results(player = NULL, rank = NULL, category = NULL)
```

Arguments

player	character string of player name.
rank	single integer or vector of integers indicating the rank of the PSA player(s) to return.
category	character string indicating the competition category. Must be one of "both", "mens", or "womens".

Value

Tibble containing the player rank, player name, player's seeding, round reached, event name, event date, event location, and event tour.

Note

This function only returns results data from players ranked in the most recent PSA rankings table for Men's and Women's singles competitions. Recent results are limited to events that occurred within the current and previous calendar years.

References

http://www.squashinfo.com/

get_rankings

Examples

```
## Get Mohamed Elshorbagy's most recent results data
get_player_recent_results(player = "Mohamed Elshorbagy", category = "mens")
```

Get Nour El Tayeb's recent results data
get_player_recent_results("El Tayeb", category = "womens")

Get recent results data from the top two players in both Men's and Women's competitions
get_player_recent_results(rank = 1:2, category = "both")

get_rankings Get the most recent PSA rankings from SquashInfo

Description

Given a competition category, get_rankings() returns the most recent PSA rankings table.

Usage

```
get_rankings(top = NULL, category = NULL)
```

Arguments

top	integer indicating the number of top PSA players by rank to return.
category	character string indicating the competition category. Must be one of "both", "mens", or "womens".

Value

Tibble containing the player rank, previous month's rank, name, highest ranking achieved, date of highest ranking, nationality, and competition category.

Note

This function only returns the most recent PSA rankings table for Men's and Women's singles competitions.

References

```
## Get the top 10 ranked men's singles players
get_rankings(top = 10, category = "mens")
## Get the top 10 ranked women's singles players
get_rankings(top = 20, category = "womens")
## Get the top 20 players in both men's and women's singles competitions
get_rankings(top = 20, category = "both")
```

get_tournaments Get tournaments from SquashInfo

Description

Given a year, get_tournaments() returns data for PSA World Tour tournaments and other events.

Usage

get_tournaments(year = 2020, world_tour = TRUE)

Arguments

year	integer indicating the tournament year. Must be one of 2019 or 2020.
world_tour	logical indicating whether to only return PSA World Tour tournaments.

Value

Tibble containing the league, competition category, name, date, city, and country.

Note

This function only returns tournaments from 2019 and 2020, as any other data are not available to non-premium members on SquashInfo.

References

http://www.squashinfo.com/results

Examples

Get data on 2020 PSA World Tour tournaments
get_tournaments()

Get data on 2019 non-PSA World Tour tournaments
get_tournaments(2019, world_tour = FALSE)

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get_tournament_games Get a tournament's games from SquashInfo

Description

Given a tournament name or a year, get_tournament_games() returns match data for PSA World Tour tournaments and other events.

Usage

```
get_tournament_games(tournament = NULL, year = 2020, world_tour = TRUE)
```

Arguments

tournament	character string of name of the tournament. Partial tournament names are matched via regular expressions.
year	integer indicating year of competition. Must be 2019, 2020, or NULL if query- ing results for both years.
world_tour	logical indicating whether to only return PSA World Tour tournaments.

Value

Tibble containing the tournament name, competition category, tournament date, round, match number, game number, player 1, player 2, the game winner, player 1's score, player 2's score, player 1's seed, player 2's seed, player 1's nationality, player 2's nationality.

Note

This function only returns game data from tournaments in 2019 and 2020, as any other data are not available to non-premium members on SquashInfo. Additionally, events that do not use a single elimination format are not included in the results (e.g. Karakal Premier League).

References

http://www.squashinfo.com/results

Examples

Return game data for 2020's Tournament of Champions. get_tournament_games("tournament of champions", year = 2020)

```
## Return game data for all PSA World Tour tournaments in 2019
get_tournament_games(year = 2019, world_tour = TRUE)
```

```
get_tournament_matches
```

Get a tournament's matches from SquashInfo

Description

Given a tournament name or a year, get_tournament_matches() returns match data for PSA World Tour tournaments and other events.

Usage

get_tournament_matches(tournament = NULL, year = 2020, world_tour = TRUE)

Arguments

tournament	character string of name of the tournament. Partial tournament names are matched via regular expressions.
year	integer indicating year of competition. Must be 2019, 2020, or NULL if query- ing results for both years.
world_tour	logical indicating whether to only return PSA World Tour tournaments.

Value

Tibble containing the tournament name, competition category, tournament date, round, player 1, player 2, the match winner, games won (by player 1), games lost (by player 1), the match time, player 1's seed, player 2's seed, player 1's nationality, player 2's nationality.

Note

This function only returns match data from tournaments in 2019 and 2020, as any other data are not available to non-premium members on SquashInfo. Additionally, events that do not use a single elimination format are not included in the results (e.g. Karakal Premier League).

References

http://www.squashinfo.com/results

Examples

```
## Return match data for 2020's Tournament of Champions.
get_tournament_matches("tournament of champions", year = 2020)
```

```
## Return match data for all PSA World Tour tournaments in 2019
get_tournament_matches(year = 2019, world_tour = TRUE)
```

get_tournament_players

Get a tournament's players from SquashInfo

Description

Given a tournament name or a year, get_tournament_players() returns player registrants for PSA World Tour tournaments and other events.

Usage

```
get_tournament_players(tournament = NULL, year = 2020, world_tour = TRUE)
```

Arguments

tournament	character string of name of the tournament. Partial tournament names are matched via regular expressions.
year	integer indicating year of competition. Must be 2019, 2020, or NULL if query- ing results for both years.
world_tour	logical indicating whether to only return PSA World Tour tournaments.

Value

Tibble containing the tournament name, competition category, tournament date, player, seed, nationality, round_reached.

Note

This function only returns player registrant data from tournaments in 2019 and 2020, as any other data are not available to non-premium members on SquashInfo. Additionally, events that do not use a single elimination format are not included in the results (e.g. Karakal Premier League).

References

http://www.squashinfo.com/results

Examples

Who played in the Tournament of Champions in 2020?
get_tournament_players(tournament = "tournament of champions", year = 2020)

```
## Return player registrant data for all PSA World Tour tournaments in 2019
get_tournament_players(year = 2019, world_tour = TRUE)
```

squashinformr

Description

The squashinform package allows sports enthusiasts to easily access data related to the Professional Squash Association's World Tour and other squash tournaments from SquashInfo. The functions within this package scrape, parse, and clean data associated with players, tournaments, and rankings data.

Details

See the README on GitHub

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