Package 'worldfootballR'

November 26, 2022

Type Package

Title Extract and Clean World Football (Soccer) Data

Version 0.6.2

Description Allow users to obtain clean and tidy

football (soccer) game, team and player data. Data is collected from a
number of popular sites, including 'FBref',
transfer and valuations data from
'Transfermarkt'<https://www.transfermarkt.com/> and shooting location
and other match stats data from 'Understat'<https://understat.com/>
and 'fotmob'<https://www.fotmob.com/>. It gives users the
ability to access data more efficiently, rather than having to export
data tables to files before being able to complete their analysis.

License GPL-3

URL https://github.com/JaseZiv/worldfootballR

BugReports https://github.com/JaseZiv/worldfootballR/issues

Depends R (>= 4.0.0)

Imports dplyr, glue, httr, janitor, jsonlite, lubridate, magrittr, progress, purrr, qdapRegex, readr, rlang, rstudioapi, rvest (>= 1.0.0), stats, stringi, stringr, tidyr (>= 1.2.0), tidyselect, utils, withr, xml2, tibble, cli, curl

Suggests knitr, rmarkdown, testthat

Encoding UTF-8

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NeedsCompilation no

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fb_advanced_match_stats

Get FBref advanced match stats

Description

Returns data frame of selected statistics for each match, for either whole team or individual players. Multiple URLs can be passed to the function, but only one 'stat_type' can be selected. Replaces the deprecated function get_advanced_match_stats()

Usage

fb_advanced_match_stats(match_url, stat_type, team_or_player, time_pause = 3)

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Arguments

match_url	the three character country code for all countries
stat_type	the type of team statistics the user requires
team_or_player	result either summarised for each team, or individual players
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"summary", "passing", "passing"_types, "defense", "possession", "misc", "keeper"

Value

returns a dataframe of a selected team statistic type for a selected match(es)

Examples

```
## Not run:
try({
    urls <- fb_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")
    df <- fb_advanced_match_stats(match_url=urls,stat_type="possession",team_or_player="player")
})
```

End(Not run)

fb_big5_advanced_season_stats
 Big 5 Euro League Season Stats

Description

Returns data frame of selected statistics for seasons of the big 5 Euro leagues, for either whole team or individual players. Multiple seasons can be passed to the function, but only one 'stat_type' can be selected

Usage

```
fb_big5_advanced_season_stats(
    season_end_year,
    stat_type,
    team_or_player,
    time_pause = 3
)
```

fb_league_urls

Arguments

season_end_year		
		the year(s) the season concludes
	stat_type	the type of team statistics the user requires
	team_or_player	result either summarised for each team, or individual players
	time_pause	the wait time (in seconds) between page loads
		The statistic type options (stat_type) include:
		"standard", "shooting", "passing", "passing_types", "gca", "defense", "posses- sion", "playing_time", "misc", "keepers", "keepers_adv"

Value

returns a dataframe of a selected team or player statistic type for a selected season(s)

Examples

```
## Not run:
try({
fb_big5_advanced_season_stats(season_end_year=2021,stat_type="possession",team_or_player="player")
})
```

End(Not run)

fb_league_urls Get fbref League URLs

Description

Returns the URLs for season leagues of a selected country

Usage

```
fb_league_urls(country, gender, season_end_year, tier = "1st")
```

Arguments

country	the three character country code
gender	gender of competition, either "M" or "F"
season_end_year	
	the year the season(s) concludes (defaults to all available seasons)
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so
	on

Value

returns a character vector of all fbref league URLs for selected country, season, gender and tier

Examples

```
## Not run:
try({
fb_league_urls(country = "ENG", gender = "M", season_end_year = 2021, tier = '1st')
})
## End(Not run)
```

fb_match_lineups Get FBref match lineups

Description

Returns lineups for home and away teams for a selected match Replaces the deprecated function get_match_lineups

Usage

fb_match_lineups(match_url, time_pause = 3)

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the team lineups for a selected match

Examples

```
## Not run:
try({
match <- fb_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")[1]
df <- fb_match_lineups(match_url = match)
})
## End(Not run)
```

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fb_match_report Get FBref match report

Description

Returns match report details for selected matches. Replaces the deprecated function get_match_report

Usage

```
fb_match_report(match_url, time_pause = 3)
```

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the match details for a selected match

Examples

```
## Not run:
try({
match <- fb_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")[1]
df <- fb_match_report(match_url = match)
})
## End(Not run)
```

fb_match_results Get FBref match results

Description

Returns the game results for a given league season(s) Replaces the deprecated function get_match_results

Usage

```
fb_match_results(
   country,
   gender,
   season_end_year,
   tier = "1st",
   non_dom_league_url = NA
)
```

Arguments

country	the three character country code	
gender	gender of competition, either "M" or "F"	
season_end_year		
	the year(s) the season concludes	
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so	
	on	
non_dom_league_url		
	the URL for Cups and Competitions found at https://fbref.com/en/comps/	

Value

returns a dataframe with the results of the competition, season and gender

Examples

```
## Not run:
try({
df <- fb_match_results(country = c("ITA"), gender = "M", season_end_year = 2021)
# for results from English Championship:
df <- fb_match_results(country = "ENG", gender = "M", season_end_year = 2021, tier = "2nd")
# for international friendlies:
})
```

End(Not run)

fb_match_shooting Get FBref match shooting event data

Description

Returns detailed player shooting data for home and away teams for a selected match(es) Replaces the deprecated function get_match_shooting

Usage

```
fb_match_shooting(match_url, time_pause = 3)
```

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe

fb_match_summary

Examples

```
## Not run:
try({
match <- "https://fbref.com/en/matches/bf52349b/Fulham-Arsenal-September-12-2020-Premier-League"
df <- fb_match_shooting(match_url = match)
})
## End(Not run)
```

fb_match_summary Get FBref match summary

Description

Returns match summary data for selected match URLs, including goals, subs and cards Replaces the deprecated function get_match_summary

Usage

fb_match_summary(match_url, time_pause = 3)

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the match events (goals, cards, subs) for selected matches

Examples

```
## Not run:
try({
match <- fb_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")[1]
df <- fb_match_summary(match_url = match)
})
```

End(Not run)

fb_match_urls (

Description

Returns the URL for each match played for a given league season Replaces the deprecated get_match_urls

Usage

```
fb_match_urls(
   country,
   gender,
   season_end_year,
   tier = "1st",
   non_dom_league_url = NA,
   time_pause = 3
)
```

Arguments

country	the three character country code
gender	gender of competition, either "M" or "F", or both
season_end_year	
	the year the season(s) concludes
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so
	on
non_dom_league_	url
	the URL for Cups and Competitions found at https://fbref.com/en/comps/
time_pause	the wait time (in seconds) between page loads

Value

returns a character vector of all fbref match URLs for selected competition, season and gender

Examples

```
## Not run:
try({
fb_match_urls(country = "ENG", gender = "M", season_end_year = c(2019:2021), tier = "1st")
non_dom <- "https://fbref.com/en/comps/218/history/Friendlies-M-Seasons"
fb_match_urls(country = "", gender = "M", season_end_year = 2021, non_dom_league_url = non_dom)
})
```

End(Not run)

Description

Returns the player's career goal and assist logs

Usage

```
fb_player_goal_logs(player_urls, time_pause = 3, goals_or_assists = "goals")
```

Arguments

Value

returns a dataframe of the player's goals and assists

Examples

```
## Not run:
try({
    # for single players:
    jwp_url <- "https://fbref.com/en/players/3515d404/"
    fb_player_goal_logs(player_urls = jwp_url, goals_or_assists = "goals")
})
## End(Not run)
```

fb_player_match_logs Get fbref Player Match Logs

Description

Returns all match logs for a selected player, season and stat type

Usage

```
fb_player_match_logs(player_url, season_end_year, stat_type, time_pause = 3)
```

Arguments

player_url	the URL of the player (can come from fb_player_urls())
season_end_year	
	the year the season(s) concludes
stat_type	the type of statistic required
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"summary", "keepers", "passing", "passing_types", "gca", "defense", "posses- sion", "misc"

Value

returns a dataframe of a player's match logs for a season

Examples

```
try({
fb_player_match_logs("https://fbref.com/en/players/3bb7b8b4/Ederson",
season_end_year = 2021, stat_type = 'summary')
})
```

fb_player_scouting_report

```
Get fbref Full Player Scouting Report
```

Description

Returns the scouting report for a selected player

Usage

```
fb_player_scouting_report(player_url, pos_versus, time_pause = 3)
```

Arguments

player_url	the URL of the player (can come from fb_player_urls())
pos_versus	either "primary" or "secondary" as fbref offer comparisons against multiple po- sitions
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe of a player's full scouting information for all seasons available on FBref

fb_player_season_stats

Examples

```
## Not run:
try({
fb_player_scouting_report(player_url = "https://fbref.com/en/players/d70ce98e/Lionel-Messi",
pos_versus = "primary")
# to filter for the last 365 days:
fb_player_scouting_report(player_url = "https://fbref.com/en/players/d70ce98e/Lionel-Messi",
pos_versus = "primary") %>% dplyr::filter(scouting_period == "Last 365 Days")
# to get secondary positions
fb_player_scouting_report(player_url = "https://fbref.com/en/players/d70ce98e/Lionel-Messi",
pos_versus = "secondary")
# for the 2020-2021 La Liga season
fb_player_scouting_report(player_url = "https://fbref.com/en/players/d70ce98e/Lionel-Messi",
pos_versus = "secondary") %>% dplyr::filter(scouting_period == "2020-2021 La Liga")
})
## End(Not run)
```

fb_player_season_stats

```
Get fbref Player Season Statistics
```

Description

Returns the historical season stats for a selected player(s) and stat type

Usage

```
fb_player_season_stats(player_url, stat_type, time_pause = 3)
```

Arguments

player_url	the URL(s) of the player(s) (can come from fb_player_urls())
<pre>stat_type</pre>	the type of statistic required
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"standard", "shooting", "passing", "passing_types", "gca", "defense", "posses-
	sion" "playing_time", "misc", "keeper", "keeper_adv"

Value

returns a dataframe of a player's historical season stats

Examples

fb_player_urls Get fbref Player URLs

Description

Returns the URLs for all players for a given team

Usage

```
fb_player_urls(team_url, time_pause = 3)
```

Arguments

team_url	the player's team URL (can be from fb_team_urls())
time_pause	the wait time (in seconds) between page loads

Value

returns a character vector of all fbref player URLs for a selected team

Examples

```
## Not run:
try({
fb_player_urls("https://fbref.com/en/squads/fd962109/Fulham-Stats")
})
## End(Not run)
```

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fb_season_team_stats Get FBref season team stats

Description

Returns different team season statistics results for a given league season and stat type Replaces the deprecated function get_season_team_stats

Usage

```
fb_season_team_stats(
   country,
   gender,
   season_end_year,
   tier,
   stat_type,
   time_pause = 3
)
```

Arguments

country	the three character country code for all countries
gender	gender of competition, either "M", "F" or both
season_end_year	
	the year the season(s) concludes
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so on
stat_type	the type of team statistics the user requires
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"league_table", "league_table_home_away", "standard", "keeper", "keeper_adv",
	"shooting", "passing", "passing_types", "goal_shot_creation", "defense", "pos-
	session", "playing_time", "misc"

Value

returns a dataframe of a selected team statistic type for a selected league season

```
## Not run:
try({
fb_season_team_stats("ITA", "M", 2021, "1st", "defense")
})
```

fb_squad_wages

Description

Returns all player wages from FBref via Capology

Usage

```
fb_squad_wages(team_urls, time_pause = 3)
```

Arguments

team_urls	the URL(s) of the teams(s) (can come from fb_teams_urls())
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with all available estimated player wages for the selected team(s)

Examples

```
## Not run:
try({
    # for single teams:
    man_city_url <- "https://fbref.com/en/squads/b8fd03ef/Manchester-City-Stats"
    fb_squad_wages(team_urls = man_city_url)
})
```

End(Not run)

fb_teams_urls Get fbref Team URLs

Description

Returns the URLs for all teams for a given league

Usage

```
fb_teams_urls(league_url, time_pause = 3)
```

Arguments

league_url	the league URL (can be from fb_league_urls())
time_pause	the wait time (in seconds) between page loads

fb_team_goal_logs

Value

returns a character vector of all fbref team URLs for a selected league

Examples

```
## Not run:
try({
fb_teams_urls("https://fbref.com/en/comps/9/Premier-League-Stats")
})
## End(Not run)
```

fb_team_goal_logs Get team goal logs

Description

Returns the team's season goal logs

Usage

```
fb_team_goal_logs(team_urls, time_pause = 3, for_or_against = "for")
```

Arguments

team_urls	the URL(s) of the team(s) (can come from fb_teams_urls())	
time_pause	the wait time (in seconds) between page loads	
for_or_against	select whether to return data of goals "for" (the default), goals "against", or "both"	

Value

returns a dataframe of the team's goals scored and conceded in the season

Examples

```
## Not run:
try({
    # for single teams:
    man_city_url <- "https://fbref.com/en/squads/b8fd03ef/Manchester-City-Stats"
    fb_team_goal_logs(team_urls = man_city_url, for_or_against = "for")
})
```

End(Not run)

```
fb_team_match_log_stats
```

Get team match log stats

Description

Returns all match statistics for a team(s) in a given season

Usage

```
fb_team_match_log_stats(team_urls, stat_type, time_pause = 3)
```

Arguments

team_urls	the URL(s) of the teams(s) (can come from fb_teams_urls())
stat_type	the type of statistic required
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"shooting", "keeper", "passing", "passing_types", "gca", "defense", "misc"

Value

returns a dataframe with the selected stat outputs of all games played by the selected team(s)

Examples

```
## Not run:
try({
    # for single teams:
    man_city_url <- "https://fbref.com/en/squads/b8fd03ef/Manchester-City-Stats"
    fb_team_match_log_stats(team_urls = man_city_url, stat_type = "passing")
})
```

End(Not run)

fb_team_match_results Get FBref team match results

Description

Returns all game results for a team in a given season Replaces the deprecated function get_team_match_results

Usage

```
fb_team_match_results(team_url, time_pause = 3)
```

Arguments

team_url	the URL for the team season
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the results of all games played by the selected team(s)

Examples

```
## Not run:
try({
    # for single teams:
    man_city_url <- "https://fbref.com/en/squads/b8fd03ef/Manchester-City-Stats"
    fb_team_match_results(man_city_url)
})
## End(Not run)
```

fb_team_player_stats Get fbref Team's Player Season Statistics

Description

Returns the team's players season stats for a selected team(s) and stat type

Usage

```
fb_team_player_stats(team_urls, stat_type, time_pause = 3)
```

Arguments

team_urls	the URL(s) of the teams(s) (can come from fb_teams_urls())
stat_type	the type of statistic required
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"standard", "shooting", "passing", "passing_types", "gca", "defense", "posses-
	sion" "playing_time", "misc", "keeper", "keeper_adv"

Value

returns a dataframe of all players of a team's season stats

Examples

fotmob_get_league_ids Get fotmob league ids

Description

Returns a dataframe of the league ids available on fotmob

Usage

```
fotmob_get_league_ids(cached = TRUE)
```

Arguments

cached Whether to load the dataframe from the data CSV. This is faster and most likely what you want to do, unless you identify a league that's being tracked by fotmob that's not in this pre-saved CSV.

fotmob_get_league_matches

Get fotmob match results by league

Description

Returns match results for all matches played on the selected date from fotmob.com.

Usage

```
fotmob_get_league_matches(country, league_name, league_id, cached = TRUE)
```

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Arguments

country	Three character country code. Can be one or multiple. If provided, 'league_name' must also be provided (of the same length)
<pre>league_name</pre>	League names. If provided, 'country' must also be provided (of the same length).
league_id	Fotmob ID for the league. Only used if 'country' and 'league_name' are not specified.
cached	Whether to load the dataframe from the data CSV. This is faster and most likely what you want to do, unless you identify a league that's being tracked by fotmob that's not in this pre-saved CSV.

Value

returns a dataframe of league matches

```
try({
library(dplyr)
library(tidyr)
# one league
fotmob_get_league_matches(
 country = "ENG",
 league_name = "Premier League"
)
# one league, by id
fotmob_get_league_matches(
 league_id = 47
)
# multiple leagues (could also use ids)
league_matches <- fotmob_get_league_matches(</pre>
                         "ESP"),
 country = c("ENG",
 league_name = c("Premier League", "LaLiga")
)
# probably the data that you care about
league_matches %>%
 dplyr::select(match_id = id, home, away) %>%
 tidyr::unnest_wider(c(home, away), names_sep = "_")
})
```

fotmob_get_league_tables

Get standings from fotmob

Description

Returns league standings from fotmob.com. 3 types are returned: all, home, away

Usage

fotmob_get_league_tables(country, league_name, league_id, cached = TRUE)

Arguments

country	Three character country code. Can be one or multiple. If provided, 'league_name' must also be provided (of the same length)
league_name	League names. If provided, 'country' must also be provided (of the same length).
league_id	Fotmob ID for the league. Only used if 'country' and 'league_name' are not specified.
cached	Whether to load the dataframe from the data CSV. This is faster and most likely what you want to do, unless you identify a league that's being tracked by fotmob that's not in this pre-saved CSV.

Value

returns a dataframe of league standings

```
try({
library(dplyr)
library(tidyr)
# one league
fotmob_get_league_tables(
 country = "ENG",
 league_name = "Premier League"
)
# one league, by id
fotmob_get_league_tables(
 league_id = 47
)
# multiple leagues (could also use ids)
league_tables <- fotmob_get_league_tables(</pre>
                          "ESP"),
 country = c("ENG",
```

```
league_name = c("Premier League", "LaLiga")
)
# look at tables if only away matches are considered
league_tables %>%
  dplyr::filter(table_type == "away")
})
```

fotmob_get_matches_by_date

Get fotmob match results by date

Description

Returns match results for all matches played on the selected date from fotmob.com

Usage

```
fotmob_get_matches_by_date(dates)
```

Arguments

dates a vector of string-formatted dates in "Ymd" format, e.g. "20210926". An attempt is made to coerce the input to the necessary format if a date is passed in.

Value

returns a dataframe of match results

```
try({
library(dplyr)
library(tidyr)
results <- fotmob_get_matches_by_date(date = c("20210925", "20210926"))
results %>%
   dplyr::select(primary_id, ccode, league_name = name, match_id)
})
```

fotmob_get_match_details

Get fotmob match details by match id

Description

Returns match details from fotmob.com

Usage

fotmob_get_match_details(match_ids)

Arguments

match_ids a vector of strings or numbers representing matches

Value

returns a dataframe of match shots

Examples

```
try({
library(dplyr)
library(tidyr)
results <- fotmob_get_matches_by_date(date = "20210926")
match_ids <- results %>%
   dplyr::select(primary_id, ccode, league_name = name, match_id) %>%
   dplyr::filter(league_name == "Premier League", ccode == "ENG") %>%
   dplyr::pull(match_id)
match_ids # 3609987 3609979
details <- fotmob_get_match_details(match_ids)
})</pre>
```

fotmob_get_match_info Get fotmob match info by match id

Description

Returns match info from fotmob.com

Usage

fotmob_get_match_info(match_ids)

Arguments

match_ids a vector of strings or numbers representing matches

Value

returns a dataframe of match info

Examples

```
try({
library(dplyr)
library(tidyr)
results <- fotmob_get_matches_by_date(date = "20210926")
match_ids <- results %>%
   dplyr::select(primary_id, ccode, league_name = name, match_id) %>%
   dplyr::filter(league_name == "Premier League", ccode == "ENG") %>%
   dplyr::pull(match_id)
match_ids # 3609987 3609979
details <- fotmob_get_match_info(match_ids)
})</pre>
```

Description

Returns match details from fotmob.com

Usage

```
fotmob_get_match_players(match_ids)
```

Arguments

match_ids a vector of strings or numbers representing matches

Value

returns a dataframe of match players

Examples

```
try({
library(dplyr)
library(tidyr)
## single match
players <- fotmob_get_match_players(3610132)
salah_id <- "292462"
players %>%
   dplyr::filter(id == salah_id) %>%
   dplyr::select(player_id = id, stats) %>%
   tidyr::unnest(stats)
## multiple matches
fotmob_get_match_players(c(3609987, 3609979))
})
```

Description

Returns match top team stats from fotmob.com

Usage

```
fotmob_get_match_team_stats(match_ids)
```

Arguments

match_ids a vector of strings or numbers representing matches

Value

returns a dataframe of match top team stats

Examples

```
try({
library(dplyr)
library(tidyr)
results <- fotmob_get_matches_by_date(date = "20210926")
match_ids <- results %>%
    dplyr::select(primary_id, ccode, league_name = name, match_id) %>%
    dplyr::filter(league_name == "Premier League", ccode == "ENG") %>%
    dplyr::pull(match_id)
```

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```
match_ids # 3609987 3609979
details <- fotmob_get_match_team_stats(match_ids)
})</pre>
```

fotmob_get_season_stats

Get season statistics from fotmob

Description

Returns team or player season-long statistics standings from fotmob.com.

Usage

```
fotmob_get_season_stats(
    country,
    league_name,
    league_id,
    season_name,
    team_or_player = c("team", "player"),
    stat_name,
    stat_league_name = league_name,
    cached = TRUE
)
```

Arguments

country	Three character country code. Can be one or multiple. If provided, 'league_name' must also be provided (of the same length)
league_name	League names. If provided, 'country' must also be provided (of the same length).
league_id	Fotmob ID for the league. Only used if 'country' and 'league_name' are not specified.
season_name	Season names in the format '"2021/2022"'. Multiple allowed. If multiple leagues are specified, season stats are retrieved for each league.
team_or_player	return statistics for either "team" or "player". Can only be one or the other.
stat_name	the type of statistic. Can be more than one. 'stat_name' must be one of the following for "player":
	• Accurate long balls per 90
	Accurate passes per 90
	• Assists
	Big chances created
	Big chances missed
	• Blocks per 90

- · Chances created
- Clean sheets
- Clearances per 90
- Expected assist (xA)
- Expected assist (xA) per 90
- Expected goals (xG)
- Expected goals (xG) per 90
- Expected goals on target (xGOT)
- FotMob rating
- Fouls committed per 90
- Goals + Assists
- Goals conceded per 90
- Goals per 90
- Goals prevented
- Interceptions per 90
- · Penalties conceded
- · Penalties won
- Possession won final 3rd per 90
- Red cards
- Save percentage
- Saves per 90
- Shots on target per 90
- Shots per 90
- Successful dribbles per 90
- Successful tackles per 90
- Top scorer
- xG + xA per 90
- Yellow cards

For "team", 'stat_name' must be one of the following:

- Accurate crosses per match
- Accurate long balls per match
- Accurate passes per match
- Average possession
- · Big chances created
- · Big chances missed
- Clean sheets
- Clearances per match
- · Expected goals
- FotMob rating
- Fouls per match
- Goals conceded per match
- Goals per match

- Interceptions per match
- · Penalties awarded
- · Penalties conceded
- Possession won final 3rd per match
- Red cards
- · Saves per match
- Shots on target per match
- · Successful tackles per match
- xG conceded
- · Yellow cards

Fotmob has changed these stat names over time, so this list may be out-dated. If you try an invalid stat name, you should see an error message indicating which ones are available.

stat_league_name

Same format as 'league_name'. If not provided explicitly, then it takes on the same value as 'league_name'. If provided explicitly, should be of the same length as 'league_name' (or 'league_id' if 'league_name' is not provided).

Note that not Fotmob currently only goes back as far as "2016/2017". Some leagues may not have data for that far back.

cached Whether to load the dataframe from the data CSV. This is faster and most likely what you want to do, unless you identify a league that's being tracked by fotmob that's not in this pre-saved CSV.

Value

returns a dataframe of team or player stats

```
try({
epl_team_xg_2021 <- fotmob_get_season_stats(
    country = "ENG",
    league_name = "Premier League",
    season = "2020/2021",
    stat_name = "Expected goals",
    team_or_player = "team"
)
})</pre>
```

get_advanced_match_stats

Get advanced match stats

Description

Returns data frame of selected statistics for each match, for either whole team or individual players. Multiple URLs can be passed to the function, but only one 'stat_type' can be selected

Usage

```
get_advanced_match_stats(match_url, stat_type, team_or_player, time_pause = 3)
```

Arguments

match_url	the three character country code for all countries
<pre>stat_type</pre>	the type of team statistics the user requires
team_or_player	result either summarised for each team, or individual players
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"summary", "passing", "passing"_types, "defense", "possession", "misc", "keeper"

Value

returns a dataframe of a selected team statistic type for a selected match(es)

```
## Not run:
try({
urls <- get_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")
df <- get_advanced_match_stats(match_url=urls,stat_type="possession",team_or_player="player")
})
## End(Not run)
```

Description

Returns lineups for home and away teams for a selected match

Usage

```
get_match_lineups(match_url, time_pause = 3)
```

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the team lineups for a selected match

Examples

```
## Not run:
try({
match <- get_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")[1]
df <- get_match_lineups(match_url = match)
})
```

End(Not run)

get_match_report Get match report

Description

Returns match report details for selected matches

Usage

```
get_match_report(match_url, time_pause = 3)
```

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the match details for a selected match

Examples

```
## Not run:
try({
match <- get_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")[1]
df <- get_match_report(match_url = match)
})
## End(Not run)
```

get_match_results Get match results

Description

Returns the game results for a given league season(s)

Usage

```
get_match_results(
   country,
   gender,
   season_end_year,
   tier = "1st",
   non_dom_league_url = NA
)
```

Arguments

country	the three character country code
gender	gender of competition, either "M" or "F"
season_end_year	
	the year(s) the season concludes
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so
	on
<pre>non_dom_league_</pre>	url
	the URL for Cups and Competitions found at https://fbref.com/en/comps/

Value

returns a dataframe with the results of the competition, season and gender

get_match_shooting

Examples

```
## Not run:
try({
df <- get_match_results(country = c("ITA"), gender = "M", season_end_year = 2021)
# for results from English Championship:
df <- get_match_results(country = "ENG", gender = "M", season_end_year = 2021, tier = "2nd")
# for international friendlies:
})
## End(Not run)
```

get_match_shooting Get match shooting event data

Description

Returns detailed player shooting data for home and away teams for a selected match(es)

Usage

```
get_match_shooting(match_url, time_pause = 3)
```

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe

```
## Not run:
try({
match <- "https://fbref.com/en/matches/bf52349b/Fulham-Arsenal-September-12-2020-Premier-League"
df <- get_match_shooting(match_url = match)
})
## End(Not run)
```

get_match_summary Get match summary

Description

Returns match summary data for selected match URLs, including goals, subs and cards

Usage

```
get_match_summary(match_url, time_pause = 3)
```

Arguments

match_url	the fbref.com URL for the required match
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the match events (goals, cards, subs) for selected matches

Examples

```
## Not run:
try({
match <- get_match_urls(country = "AUS", gender = "F", season_end_year = 2021, tier = "1st")[1]
df <- get_match_summary(match_url = match)
})
## End(Not run)
```

get_match_urls Get match URLs

Description

Returns the URL for each match played for a given league season

Usage

```
get_match_urls(
  country,
  gender,
  season_end_year,
  tier = "1st",
  non_dom_league_url = NA,
  time_pause = 3
)
```

Arguments

country	the three character country code
gender	gender of competition, either "M" or "F", or both
season_end_year	
	the year the season(s) concludes
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so
	on
non_dom_league_url	
	the URL for Cups and Competitions found at https://fbref.com/en/comps/
time_pause	the wait time (in seconds) between page loads

Value

returns a character vector of all fbref match URLs for selected competition, season and gender

Examples

```
## Not run:
try({
get_match_urls(country = "ENG", gender = "M", season_end_year = c(2019:2021), tier = "1st")
non_dom <- "https://fbref.com/en/comps/218/history/Friendlies-M-Seasons"
get_match_urls(country = "", gender = "M", season_end_year = 2021, non_dom_league_url = non_dom)
})
```

End(Not run)

get_player_market_values

Get player market values

Description

Returns data frame of player valuations (in Euros) from transfermarkt.com

Usage

```
get_player_market_values(country_name, start_year, league_url = NA)
```

Arguments

country_name	the country of the league's players
start_year	the start year of the season (2020 for the 20/21 season)
league_url	league url from transfermarkt.com. To be used when country_name not avail-
	able in main function

Value

returns a dataframe of player valuations for country/seasons

get_season_team_stats Get season team stats

Description

Returns different team season statistics results for a given league season and stat type

Usage

```
get_season_team_stats(
   country,
   gender,
   season_end_year,
   tier,
   stat_type,
   time_pause = 3
)
```

Arguments

country	the three character country code for all countries
gender	gender of competition, either "M", "F" or both
season_end_year	
	the year the season(s) concludes
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so on
stat_type	the type of team statistics the user requires
time_pause	the wait time (in seconds) between page loads
	The statistic type options (stat_type) include:
	"league_table", "league_table_home_away", "standard", "keeper", "keeper_adv",
	"shooting", "passing", "passing_types", "goal_shot_creation", "defense", "pos-
	session", "playing_time", "misc"

Value

returns a dataframe of a selected team statistic type for a selected league season

Examples

```
## Not run:
try({
get_season_team_stats("ITA", "M", 2021, "1st", "defense")
})
```

End(Not run)

get_team_match_results

Get team match results

Description

Returns all game results for a team in a given season

Usage

```
get_team_match_results(team_url, time_pause = 3)
```

Arguments

team_url	the URL for the team season
time_pause	the wait time (in seconds) between page loads

Value

returns a dataframe with the results of all games played by the selected team(s)

Examples

```
## Not run:
try({
    # for single teams:
    man_city_url <- "https://fbref.com/en/squads/b8fd03ef/Manchester-City-Stats"
    get_team_match_results(man_city_url)
})
```

End(Not run)

load_fb_big5_advanced_season_stats
 Load Big 5 Euro League Season Stats

Description

Loading version of fb_big5_advanced_season_stats Returns data frame of selected statistics for seasons of the big 5 Euro leagues, for either whole team or individual players. Multiple seasons can be passed to the function, but only one 'stat_type' can be selected

Usage

```
load_fb_big5_advanced_season_stats(
   season_end_year = NA,
   stat_type,
   team_or_player
)
```

Arguments

season_end_year	
	the year(s) the season concludes
<pre>stat_type</pre>	the type of team statistics the user requires
team_or_player	result either summarised for each team, or individual players
	The statistic type options (stat_type) include:
	"standard", "shooting", "passing", "passing_types", "gca", "defense", "posses-
	sion", "playing_time", "misc", "keepers", "keepers_adv"

Value

returns a dataframe of a selected team or player statistic type for a selected season(s)

Examples

```
try({
  df <- load_fb_big5_advanced_season_stats(
    season_end_year = c(2018:2022), stat_type = "defense", team_or_player = "player"
  )
  df <- load_fb_big5_advanced_season_stats(
    season_end_year = 2022, stat_type = "defense", team_or_player = "player"
  )
})</pre>
```

load_fotmob_matches_by_date
 Load pre saved fotmob match ids by date

Description

Loading version of fotmob_get_matches_by_date. Goes back to August 2017.

Usage

```
load_fotmob_matches_by_date(country, league_name, league_id, cached = TRUE)
```

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Arguments

country	Three character country code. Can be one or multiple. If provided, 'league_name' must also be provided (of the same length)
league_name	League names. If provided, 'country' must also be provided (of the same length).
league_id	Fotmob ID for the league. Only used if 'country' and 'league_name' are not specified.
cached	Whether to load the dataframe from the data CSV. This is faster and most likely what you want to do, unless you identify a league that's being tracked by fotmob that's not in this pre-saved CSV.

Value

returns a dataframe of league match ids

Examples

```
## Not run:
try({
## just load match ids
load_fotmob_matches_by_date(
  country = "ENG",
  league_name = "Premier League"
)
## can also do it for multiple leagues
load_fotmob_matches_by_date(
                                    "ESP"
             c("ENG",
                                            ),
  country =
  league_name = c("Premier League", "LaLiga")
)
})
## End(Not run)
```

load_fotmob_match_details

Load pre saved fotmob match details

Description

Loading version of fotmob_get_match_details, but for all seasons for which data is available, not just the current season. Note that fotmobonly has match details going back to the 2020-21 season for most leagues.

Usage

```
load_fotmob_match_details(country, league_name, league_id, cached = TRUE)
```

Arguments

country	Three character country code. Can be one or multiple. If provided, 'league_name' must also be provided (of the same length)
league_name	League names. If provided, 'country' must also be provided (of the same length).
league_id	Fotmob ID for the league. Only used if 'country' and 'league_name' are not specified.
cached	Whether to load the dataframe from the data CSV. This is faster and most likely what you want to do, unless you identify a league that's being tracked by fotmob that's not in this pre-saved CSV.

Value

returns a dataframe of league matches

Examples

```
## Not run:
try({
# one league
load_fotmob_match_details(
  country = "ENG",
  league_name = "Premier League"
)
## this is the same output format as the following
fotmob_get_match_details(match_id = 3411352)
# one league, by id
load_fotmob_match_details(league_id = 47)
# multiple leagues (could also use ids)
load_fotmob_match_details(
             c("ENG",
                                    "ESP"
  country =
                                            ),
  league_name = c("Premier League", "LaLiga")
)
})
## End(Not run)
```

load_match_comp_results

Load match competition results

Description

Returns the game results for a competition(s), ie League cups or international competitions from FBref. comp_name comes from https://github.com/JaseZiv/worldfootballR_data/tree/master/data/match_results_cups#readm

```
load_match_results
```

Usage

load_match_comp_results(comp_name)

Arguments

comp_name the three character country code

Value

returns a dataframe with the results of the competition name

Examples

load_match_results Load match results

Description

Loading version of get_match_results Returns the game results for a given league season(s) from FBref

Usage

```
load_match_results(country, gender, season_end_year, tier)
```

Arguments

country	the three character country code	
gender	gender of competition, either "M" or "F"	
season_end_year		
	the year(s) the season concludes	
tier	the tier of the league, ie '1st' for the EPL or '2nd' for the Championship and so on	

Value

returns a dataframe with the results of the competition, season and gender

Examples

```
try({
  df <- load_match_results(
    country = c("ITA"), gender = "M", season_end_year = 2021, tier = "1st"
  )
  # for results from English 1st div for men and women:
  df <- load_match_results(
    country = "ENG", gender = c("M", "F"), season_end_year = 2021, tier = "1st"
  )
})</pre>
```

load_understat_league_shots

Load Understat league shot locations

Description

Loading version of understat_league_season_shots, but for all seasons Returns shooting locations for all matches played in the selected league

Usage

```
load_understat_league_shots(league)
```

Arguments

league	the available leagues in Understat as outlined below		
	The leagues currently available for Understat are:	"EPL", "La liga", "	'Bun-
	desliga", "Serie A", "Ligue 1", "RFPL"		

Value

returns a dataframe of shooting locations for a selected league

Examples

```
## Not run:
try({
df <- load_understat_league_shots(league="Serie A")
})
```

End(Not run)

player_dictionary_mapping

Player Mapping Dictionary

Description

Returns data frame of players from the top 5 Euro leagues, their player URL and their respective Transfermarkt URL. Currently only for the players who have been in the top 5 leagues since the 2017-2018 season

Usage

player_dictionary_mapping()

Value

returns a dataframe of FBref players and respective Transfermarkt URL

Examples

try({
mapped_players <- player_dictionary_mapping()
})</pre>

player_transfer_history

Get player transfer history

Description

Returns data frame of player(s) transfer history from transfermarkt.com

Usage

```
player_transfer_history(player_urls)
```

Arguments

player_urls the player url(s) from transfermarkt

Value

returns a dataframe of player transfers

tm_expiring_contracts Get expiring contracts

Description

Returns a data frame of players with expiring contracts for a selected league and time period

Usage

```
tm_expiring_contracts(country_name, contract_end_year, league_url = NA)
```

Arguments

country_name	the country of the league's players	
contract_end_year		
	the year the contract is due to expire	
league_url	league url from transfermarkt.com. To be used when country_name not available in main function	

Value

returns a dataframe of expiring contracts in the selected league

tm_league_debutants Get league debutants

Description

Returns a data frame of debutants for a selected league

Usage

```
tm_league_debutants(
   country_name,
   league_url = NA,
   debut_type,
   debut_start_year,
   debut_end_year
)
```

Arguments

country_name	the country of the league's players	
league_url	league url from transfermarkt.com. To be used when country_name not available in main function	
debut_type	whether you want 'league' debut or 'pro' debut	
debut_start_year		
	the season start year of the beginning of the period you want results for	
debut_end_year	the season start year of the end of the period you want results for	

Value

returns a dataframe of players who debuted in the selected league

tm_league_injuries Get league injuries

Description

Returns a data frame of all currently injured players players for a selected league

Usage

tm_league_injuries(country_name, league_url = NA)

Arguments

country_name	the country of the league's players
league_url	league url from transfermarkt.com. To be used when country_name not available in main function

Value

returns a dataframe of injured players in the selected league

tm_league_team_urls Get transfermarkt Team URLs

Description

Returns the URLs for all teams for a given league season

Usage

```
tm_league_team_urls(country_name, start_year, league_url = NA)
```

Arguments

country_name	the country of the league's players
start_year	the start year of the season (2020 for the 20/21 season)
league_url	league url from transfermarkt.com. To be used when country_name not available in main function

Value

returns a character vector of all transfermarkt team URLs for a selected league

Description

Returns the league table for each chosen matchday from transfermarkt

Usage

```
tm_matchday_table(country_name, start_year, matchday, league_url = NA)
```

Arguments

country_name	the country of the league's players
start_year	the start year of the season (2020 for the 20/21 season)
matchday	the matchweek number. Can be a vector of matchdays
league_url	league url from transfermarkt.com. To be used when country_name not avail- able in main function

Value

returns a dataframe of the table for a selected league and matchday

tm_player_bio

Examples

```
## Not run:
try({
tm_matchday_table(country_name="England", start_year="2020", matchday=1)
tm_matchday_table(country_name="England", start_year="2020", matchday=c(1:5))
})
```

End(Not run)

tm_player_bio Get transfermarkt player bios

Description

Returns data frame of player bios from transfermarkt.com

Usage

```
tm_player_bio(player_urls)
```

Arguments

player_urls player url(s) from transfermarkt

Value

returns a dataframe of player bios

Examples

End(Not run)

tm_player_injury_history

Get player injury history

Description

Returns data frame of a player's injury history transfermarkt.com

Usage

```
tm_player_injury_history(player_urls)
```

Arguments

player_urls player url(s) from transfermarkt

Value

returns a dataframe of player injury history

```
tm_player_market_values
```

Get Transfermarkt player market values

Description

Returns data frame of player valuations (in Euros) from transfermarkt.com Replaces the deprecated function get_player_market_values

Usage

```
tm_player_market_values(country_name, start_year, league_url = NA)
```

Arguments

country_name	the country of the league's players
start_year	the start year of the season (2020 for the 20/21 season)
league_url	league url from transfermarkt.com. To be used when country_name not avail- able in main function

Value

returns a dataframe of player valuations for country/seasons

tm_player_transfer_history

Get Transfermarkt player transfer history

Description

Returns data frame of player(s) transfer history from transfermarkt.com Replaces the deprecated function player_transfer_history

Usage

tm_player_transfer_history(player_urls)

Arguments

player_urls the player url(s) from transfermarkt

Value

returns a dataframe of player transfers

```
tm_squad_stats Get squad player stats
```

Description

Returns basic stats for players of a team season

Usage

```
tm_squad_stats(team_url)
```

Arguments

team_url transfermarkt.com team url for a season

Value

returns a dataframe of all player stats for team(s)

Description

Returns all roles a selected staff member(s) has held and performance data

Usage

```
tm_staff_job_history(staff_urls)
```

Arguments

```
staff_urls transfermarkt.com staff(s) url (can use tm_league_staff_urls() to get)
```

Value

returns a data frame of all roles a selected staff member(s) has held and performance data

tm_team_player_urls Get transfermarkt Player URLs

Description

Returns the transfermarkt URLs for all players for a given team

Usage

```
tm_team_player_urls(team_url)
```

Arguments

team_url the player's team URL (can be from tm_league_team_urls())

Value

returns a character vector of all transfermarkt player URLs for a selected team

tm_team_staff_history Get team staff history

Description

Returns all people who have held the selected role in a team's history

Usage

```
tm_team_staff_history(team_urls, staff_role = "Manager")
```

Arguments

team_urls	transfermarkt.com team(s) url for a season
staff_role	the role description which can be found here: https://github.com/JaseZiv/worldfootballR_data/blob/master data/transfermarkt_staff/tm_staff_types.csv

Value

returns a data frame of all selected staff roles for a team(s) history

tm_team_staff_urls Get transfermarkt Club Staff URLs

Description

Returns the transfermarkt URLs for all staff of selected roles for a given team

Usage

tm_team_staff_urls(team_urls, staff_role)

Arguments

team_urls	the staff member's team URL (can be from tm_league_team_urls())
staff_role	role of the staff member URLs required for with options including:
	"Manager", "Assistant Manager", "Goalkeeping Coach", "Fitness Coach", "Con-
	ditioning Coach"

Value

returns a character vector of all transfermarkt staff URLs for a selected team(s)

tm_team_transfers Get team transfers

Description

Returns all transfer arrivals and departures for a given team season

Usage

```
tm_team_transfers(team_url, transfer_window = "all")
```

Arguments

team_url transfermarkt.com team url for a season transfer_window which window the transfer occurred - options include "all" for both, "summer" or "winter"

Value

returns a dataframe of all team transfers

tm_team_transfer_balances

Team transfer balances

Description

Returns all team's transfer aggregated performances for a chosen league season

Usage

```
tm_team_transfer_balances(country_name, start_year, league_url = NA)
```

Arguments

country_name	the country of the league's players
start_year	the start year of the season (2020 for the 20/21 season)
league_url	league url from transfermarkt.com. To be used when country_name not avail- able in main function

Value

returns a dataframe of the summarised financial transfer performance of all teams for a league season

understat_league_match_results

Get Understat season match results

Description

Returns match results for all matches played in the selected league season from Understat.com

the available leagues in Understat as outlined below

Usage

```
understat_league_match_results(league, season_start_year)
```

Arguments

league

season_start_year

the year the season started The leagues currently available for Understat are: "EPL", "La liga", "Bundesliga", "Serie A", "Ligue 1", "RFPL"

Value

returns a dataframe of match results for a selected league season

```
understat_league_season_shots
```

Get Understat league season shot locations

Description

Returns shooting locations for all matches played in the selected league season from Understat.com

Usage

```
understat_league_season_shots(league, season_start_year)
```

Arguments

league the available leagues in Understat as outlined below season_start_year

the year the season started

The leagues currently available for Understat are: "EPL", "La liga", "Bundesliga", "Serie A", "Ligue 1", "RFPL"

Value

returns a dataframe of shooting locations for a selected league season

understat_match_shots Get Understat match shot locations

Description

Returns shooting locations for a selected match from Understat.com

Usage

```
understat_match_shots(match_url)
```

Arguments

match_url the URL of the match played

Value

returns a dataframe of shooting locations for a selected team season

understat_player_shots

Get all Understat shot locations for a player

Description

Returns shooting locations for a selected player for all matches played from Understat.com

Usage

```
understat_player_shots(player_url)
```

Arguments

player_url the URL of a selected player

Value

returns a dataframe of shooting locations for a selected player

understat_team_meta Get Understat team info

Description

Retrieve Understat team metadata, including team URLs. Similar to 'understatr::get_team_meta'.

Usage

```
understat_team_meta(team_names)
```

Arguments

team_names a vector of team names (can be just 1)

Value

a data.frame

Examples

```
## Not run:
try({
understat_team_meta(team_name = c("Liverpool", "Manchester City"))
})
```

End(Not run)

understat_team_players_stats Get Understat team player stats

Description

Retrieve Understat team player stats.

Usage

```
understat_team_players_stats(team_url)
```

Arguments

team_url the URL of the team season

Value

a dataframe of player stats for a selected team season

understat_team_season_shots

Get Understat team season shot locations

Description

Returns shooting locations for all matches played by a selected team from Understat.com

Usage

```
understat_team_season_shots(team_url)
```

Arguments

team_url the URL of the team season

Value

returns a dataframe of shooting locations for a selected team season

understat_team_stats_breakdown

Get Understat team statistics breakdowns

Description

Returns a data frame for the selected team(s) with stats broken down in different ways. Breakdown groups include:

Usage

understat_team_stats_breakdown(team_urls)

Arguments

team_urls the url(s) of the teams in question

Details

"Situation", "Formation", "Game state", "Timing", "Shot zones", "Attack speed", "Result"

Value

returns a dataframe of all stat groups and values

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