Codebook v1.0

The Fjelstul World Cup Database

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tournaments

Tournaments

Description

This dataset records all World Cup tournaments. There is one observation per tournament. It includes the host of the tournament, the winner of the tournament, the start and end dates of the tournament, and information about the format of the tournament. There are 18 variables and 21 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. Has the format WC-#### , where the number is the year of the tournament.
tournament_name	text The name of the tournament.
year	integer The year of the tournament.
start_date	date The start date of the tournament in the format YYYY-MM-DD .
end_date	date The end date of the tournament in the format YYYY-MM-DD .
host_country	text The unique ID number for the country that hosted the tournament. References team_id in the teams dataset.

winner text The name of the team that won the tournament.

host_won boolean Whether one of the host countries won the tournament.

Coded 1 if one of the host countries won and 0 otherwise.

count_teams integer The number of teams that participated in the

tournament.

group_stage boolean Whether the match is a group stage match. Coded 1

if the match is a group stage match and 0 otherwise.

second_group_stage boolean Whether there was a second group stage. Coded 1 if

there was a second group stage and 0 otherwise.

final_round boolean Whether there was a final round. Coded 1 if there

was a final round and 0 otherwise.

round_of_16 boolean Whether there was a round of 16 stage. Coded 1 if

there was a round of 16 stage and 0 otherwise.

quarter_finals boolean Whether there was a quarter-finals stage. Coded 1 if

there was a quarter-finals stage and 0 otherwise.

semi_finals boolean Whether there was a semi-finals stage. Coded 1 if

there was a semi-finals stage and 0 otherwise.

third_place_match boolean Whether there was a third-place match. Coded 1 if

there was a third-place match and 0 otherwise.

final boolean Whether there was a final match. Coded 1 if there

was a final match and 0 otherwise.

confederations

Confederations

Description

This dataset records all FIFA confederations. There is one observation per confederation. There are 5 variables and 6 observations.

Variables

teams

Teams

Description

This dataset records all teams who have participated in a World Cup match. There is one observation per team. It includes the 3-letter ISO code for each country and information about each country's national federation and FIFA confederation. There are 11 variables and 84 observations.

key_id	integer The unique ID number for the observation.
team_id	T-##, where the number is a counter that is assigned with the data sorted by the year of the team's first tournament and then by the team's name.
team_name	text The name of the team.
team_code	text The 3-letter code for the team.
federation_name	text The name of the team's federation.
region_name	text The name of the region that the country is located in.
confederation_id	text The unique ID number for the confederation. References confederation_id in the confederations dataset.

confederation_name text The name of the confederation.

confederation_code text The abbreviation for the confederation.

team_wikipedia_link text The Wikipedia link for the team.

federation_wikipedia_link text The Wikipedia link of the team's federation.

players

Players

Description

This dataset records all players who have participated in a World Cup match, including players on the bench. There is one observation per player. It includes their name, their birth date, and a link to their Wikipedia page, if they have one. Note that it does not include their team, as a small number of players represent different countries in different tournaments. There are 12 variables and 7907 observations.

key_id	integer The unique ID number for the observation.
player_id	text The unique ID number for the player. Has the format P-#### , where the number is a randomly drawn, uniquely identifying number.
family_name	text The family name of the player.
given_name	text The given name of the player.
birth_date	date The birth date of the player in the format YYYY-MM-DD.
goal_keeper	boolean Whether the player was a goal keeper. Coded 1 if the player was a goal keeper and 0 otherwise.
defender	boolean Whether the player was a defender. Coded 1 if the player was a defender and 0 otherwise.

midfielder boolean Whether the player was a midfielder. Coded 1 if the

player was a midfielder and 0 otherwise.

forward boolean Whether the player was a forward. Coded 1 if the

player was a forward and 0 otherwise.

count_tournaments integer The number of tournaments that the player

participated in.

list_tournaments text A list of tournaments that the player participated in,

separated by a comma.

player_wikipedia_link text The name of the team of the player.

managers

Managers

Description

This dataset records all managers who have participated in a World Cup match. There is one observation per manager. It includes their name, their home country, and a link to their Wikipedia page, if they have one. There are 6 variables and 357 observations.

key_id	integer The unique ID number for the observation.
manager_id	text The unique ID number for the manager. Has the format M-####, where the number is a counter that is assigned with the data sorted by the year of the manager's first appearance, then by the manager's family name, and then by the manager's given name.
family_name	text The family name of the manager.
given_name	text The given name of the manager.
country_name	text The name of the manager's home country.
manager_wikipedia_link	text The Wikipedia link for the manager.

referees

Referees

Description

This dataset records all referees who have participated in a World Cup match. There is one observation per referee. It includes their name, their home country, their confederation, and a link to their Wikipedia page, if they have one. There are 9 variables and 380 observations.

key_id	integer The unique ID number for the observation.
referee_id	The unique ID number for the referee. Has the format R-####, where the number is a counter that is assigned with the data sorted by the year of the referee's first appearance, then by the referee's family name, and then by the referee's given name.
family_name	text The family name of the referee.
given_name	text The given name of the referee.
country_name	text The name of the referee's home country.
confederation_id	text The unique ID number for the confederation. References confederation_id in the confederations dataset.
confederation_name	text The name of the confederation.

confederation_code text The abbreviation for the confederation.

referee_wikipedia_link text The Wikipedia link for the referee.

stadiums

Stadiums

Description

This dataset records all stadiums that have hosted a World Cup match. There is one observation per stadium. It includes the country and city of the stadium, the approximate capacity of the stadium, and the link to the Wikipedia pages for the city and the stadium. There are 8 variables and 185 observations.

key_id	integer The unique ID number for the observation.
stadium_id	text The unique ID number for the stadium. Has the format S-###, where the number is a count that is assigned with the data sorted by country, then by city, then by the name of the stadium.
stadium_name	text The name of the stadium.
city_name	text The city in which the match was played.
country_name	text The name of the country in which the stadium is located.
stadium_capacity	integer The approximate capacity of the stadium.
stadium_wikipedia_link	text The Wikipedia link for the stadium.

city_wikipedia_link

text The Wikipedia link for the city in which the match was played.

matches

Matches

Description

This dataset records all World Cup matches. There is one observation per match per tournament. It includes the home team, the away team, the date of the match, the country, city, and stadium that the match was played in, the final score, the score margin for each team, whether the match went to extra time, whether there was a penalty shootout, the number of penalties scored in the shootout (if applicable), the result of the match (home team win, away team win, draw, replayed), and the winner (if applicable). There are 37 variables and 900 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match. Has the format
	M-###-## , where the first number is the year of the tournament and the second number is a within-tournament counter that is
	assigned with the data sorted by the date of the match, then by the
	time of the match, then by the name of the group, and then by name of the home team.

match_name text The name of the match.

stage_name enum The stage of the tournament in which the match occurred.

> The possible values are: first round, second round, group stage, round of sixteen, quarter-finals, semi-finals, third place match, final. Note that not all

values are applicable to all tournaments.

text The name of the group. group_name

group_stage boolean Whether the match is a group stage match. Coded 1

if the match is a group stage match and 0 otherwise.

boolean Whether the match is a knockout stage match. Coded knockout_stage

1 if the match is a knockout stage match and 0 otherwise.

replayed boolean Whether the match was replayed. Coded 1 if the

match was replayed and 0 otherwise.

replay boolean Whether the match was a replay. Coded 1 if the

match was a replay and 0 otherwise.

match_date date The date of the match in the format YYYY-MM-DD.

match_time integer The time of the match in the format HH:MM.

stadium_id text The unique ID number for the stadium. References

stadium_id in the stadiums dataset.

text The name of the stadium. stadium_name

text The city in which the match was played. city_name

country_name text The name of the country in which the match was played.

home_team_id text The unique ID number for the home team. References

team_id in the teams dataset.

home_team_name text The name of the home team. See the teams dataset.

text The 3-letter code for the home team. home_team_code

away_team_id text The unique ID number for the away team. References

team_id in the teams dataset.

away_team_name text The name of the away team. See the teams dataset.

away_team_code text The 3-letter code for the away team.

score text The score of the match in the format #-#, where the first

number is the score of the home team and the second number is

the score of the away team.

home_team_score integer The score of the home team.

away_team_score integer The score of the away team.

home_team_score_margin integer The score margin for the home team.

away_team_score_margin integer The score margin for the away team.

extra_time boolean Whether the match went to extra time. Coded 1 if the

match went to extra time and 0 otherwise.

penalty_shootout boolean Whether the match ended in a penalty shootout. Coded

1 if the match ended in a penalty shootout and 0 otherwise.

score_penalties text The score of the penalty shootout in the format #-#.

Coded 0-0 if there was not a penalty shootout.

home_team_score_penalties integer The score of the home team in the penalty shootout.

Coded NA if there was not a penalty shootout.

away_team_score_penalties integer The score of the away team in the penalty shootout.

Coded NA if there was not a penalty shootout.

result enum The result of the match. The possible values are:

home team win , away team win , draw , replayed .

home_team_win boolean Whether the home team won the match. Coded 1 if

the home team won the match and 0 otherwise.

away_team_win boolean Whether the home team won the match. Coded 1 if

the home team won the match and 0 otherwise.

draw

boolean Whether the match ended in a draw. Coded 1 of the match ended in a draw and 0 otherwise.

awards

Awards

Description

This dataset records all individual awards that are handed out to players. There is one observation per award. It includes the name of the award, the year the award was first introduced, and a description of the award. There are 5 variables and 8 observations.

key_id	integer The unique ID number for the observation.
award_id	text The unique ID number for the award. Has the format A-#, where the number is a counter.
award_name	enum The name of the award. The possible values are: Golden Ball, Silver Ball, Bronze Ball, Golden Boot, Silver Boot, Bronze Boot, Golden Glove, Best Young Player.
award_description	text A description of the award.
year_introduced	integer The year the award was first introduced.

qualified_teams

Qualified teams

Description

This dataset records all qualified teams. There is one observation per team per tournament. It includes the tournament, the team, and the performance of each team (the furthest stage reached). There are 8 variables and 457 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
team_id	text The unique ID number for the team. References team_id in the teams dataset.
team_name	text The name of the team.
team_code	text The 3-letter code for the team.
count_matches	integer The number of matches that the team played in the tournament.
performance	text The furthest stage of the tournament reached by the team.

squads

Squads

Description

This dataset records the composition of each squad. There is one observation per player per team per tournament. It includes the position of each player, the shirt number of each player (from 1954), the current club of each player, and a link to the Wikipedia page for the club, if it has one. There are 12 variables and 10142 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
team_id	text The unique ID number for the team. References team_id in the teams dataset.
team_name	text The name of the team of the player.
team_code	text The 3-letter code for the team.
player_id	text The unique ID number for the player. References player_id in the players dataset.

family_name text The family name of the player.

given_name text The given name of the player.

shirt_number integer The shirt number of the player.

position_name enum The position of the player. The possible values are:

goal keeper, defender, midfielder, forward.

position_code enum The code for the position of the player. The possible values

are: GK , DF , MF , FW .

manager_appointments

Manager appointments

Description

This dataset records all manager appointments. There is one observation per manager per team per tournament. There are some teams that have co-managers. There are 10 variables and 469 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
team_id	text The unique ID number for the team. References team_id in the teams dataset.
team_name	text The name of the team of the manager.
team_code	text The 3-letter code for the team.
manager_id	text The unique ID number for the manager. References manager_id in the managers dataset.
family_name	text The family name of the manager.

given_name text The given name of the manager.

country_name text The name of the manager's home country.

referee_appointments

Referee appointments

Description

This dataset records all referee appointments. There is one observation per referee per tournament. This dataset only includes the main referee, not assistant referees, fourth officials, or video assistant referees. There are 10 variables and 511 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
referee_id	text The unique ID number for the referee. References referee_id in the referees dataset.
family_name	text The family name of the referee.
given_name	text The given name fo the referee.
country_name	text The name of the referee's home country.
confederation_id	text The unique ID number for the confederation. References confederation_id in the confederations dataset.

confederation_name text The name of the confederation.

confederation_code text The abbreviation for the confederation.

team_appearances

Team appearances

Description

This dataset records all team appearances. There is one observation per team per match per tournament. It includes whether the team is the home team or the away team, the number of goals for and against, the goal difference, whether there was a penalty shootout, penalties for and against (if applicable), and whether the team wins, loses, or draws. There are 36 variables and 1800 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match. References match_id in the matches dataset.
match_name	text The name of the match.
stage_name	enum The stage of the tournament in which the match occurred. The possible values are: first round , second round ,
	group stage, round of sixteen, quarter-finals,

semi-finals, third place match, final. Note that not all values are applicable to all tournaments.

group_name text The name of the group.

group_stage boolean Whether the match is a group stage match. Coded 1

if the match is a group stage match and 0 otherwise.

knockout_stage boolean Whether the match is a knockout stage match. Coded

1 if the match is a knockout stage match and 0 otherwise.

replayed boolean Whether the match was replayed. Coded 1 if the

match was replayed and 0 otherwise.

replay boolean Whether the match was a replay. Coded 1 if the

match was a replay and 0 otherwise.

match_date date The date of the match in the format YYYY-MM-DD .

match_time integer The time of the match in the format HH:MM.

stadium_id text The unique ID number for the stadium. References

stadium_id in the stadiums dataset.

stadium_name text The name of the stadium.

city_name text The city in which the match was played.

country_name text The name of the country in which the match was played.

team_id text The unique ID number for the team. References team_id

in the teams dataset.

team_name text The name of the team.

team_code text The 3-letter code for the team.

opponent_id text The unique ID number for the team's opponent.

References team_id in the teams dataset.

opponent_name text The name of the team's opponent.

opponent_code text The 3-letter code for the team's opponent. home_team boolean Whether the team was the home team. Coded 1 if the team was the home team and 0 otherwise. away_team boolean Whether the team was the away team. Coded 1 if the team was the away team and 0 otherwise. integer The number of goals scored by the team. goals_for integer The number of goals scored against the team. goals_against integer The team's goal differential. goal_differential boolean Whether the match went to extra time. Coded 1 if the extra_time match went to extra time and 0 otherwise. penalty_shootout boolean Whether the match ended in a penalty shootout. Coded 1 if the match ended in a penalty shootout and 0 otherwise. integer The number of penalties scored by the opponent, if the penalties_for match ended in a penalty shootout. Coded 0 if there was not a shootout. integer The number of penalties scored by the team, if the penalties_against match ended in a penalty shootout. Coded 0 if there was not a shootout. result enum The result of the match. The possible values are: home team win , away team win , draw , replayed . boolean Whether the team won the match. Coded 1 if the win team won the match and 0 otherwise. lose boolean Whether the team lost the match. Coded 1 if the team lost the match and 0 otherwise. boolean Whether the match ended in a draw. Coded 1 of the draw match ended in a draw and 0 otherwise.

player_appearances

Player appearances

Description

This dataset records all player appearances since 1970. There is one observation per player per team per match per tournament. It includes players who play in the match, including players who are in the starting eleven and players who come in as substitutes. FIFA match reports do not include information about substitutions before 1970. There are 22 variables and 18623 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match. References match_id in the matches dataset.
match_name	text The name of the match.
date	date The date of the match in the format YYYY-MM-DD.
stage_name	enum The stage of the tournament in which the match occurred.
	The possible values are: first round , second round ,
	group stage, round of sixteen, quarter-finals,

semi-finals, third place match, final. Note that not all values are applicable to all tournaments.

group_name text The name of the group.

team_id text The unique ID number for the team of the player.

References team_id in the teams dataset.

team_name text The name of the team of the player.

team_code text The 3-letter code for the team of the player.

home_team boolean Whether the team was the home team. Coded 1 if

the team was the home team and 0 otherwise.

away_team boolean Whether the team was the away team. Coded 1 if the

team was the away team and 0 otherwise.

player_id text The unique ID number for the player. References

player_id in the players dataset.

family_name text The family name of the player.

given_name text The given name of the player.

shirt_number integer The shirt number of the player.

position_name text The name of the position of the player.

position_code text A 2-letter or 3-letter code that indicates the position of the

player.

starter boolean Whether the player started the match. Coded 1 if the

player started the match and 0 otherwise.

substitute boolean Whether the player was a substitute. Coded 1 if the

player was a substitute and 0 otherwise.

captain boolean Whether the player was the captain of the team. Coded

1 if the player was the captain and 0 otherwise.

manager_appearances

Manager appearances

Description

This dataset records all manager appearances. There is one observation per manager per team per match per tournament. There are some teams that have co-managers. There are 17 variables and 1842 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match. References match_id in the matches dataset.
match_name	text The name of the match.
match_date	date The date of the match in the format YYYY-MM-DD.
match_stage	enum The stage of the tournament in which the match occurred.
	The possible values are: first round, second round,
	group stage, round of sixteen, quarter-finals,

semi-finals, third place match, final. Note that not all values are applicable to all tournaments.

group_name text The name of the group.

team_id text The unique ID number for the team of the manager.

References team_id in the teams dataset.

team_name text The name of the team of the manager.

team_code text The 3-letter code for the team of the manager.

home_team boolean Whether the team was the home team. Coded 1 if

the team was the home team and 0 otherwise.

away_team boolean Whether the team was the away team. Coded 1 if the

team was the away team and 0 otherwise.

manager_id text The unique ID number for the manager. References

manager_id in the managers dataset.

family_name text The family name of the manager.

given_name text The given name of the manager.

country_name text The name of the manager's home country.

referee_appearances

Referee appearances

Description

This dataset records all referee appearances. There is one observation per referee per match per tournament. There are 15 variables and 900 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match. References match_id in the matches dataset.
match_name	text The name of the match.
match_date	date The date of the match in the format YYYY-MM-DD.
match_stage	enum The stage of the tournament in which the match occurred. The possible values are: first round, second round, group stage, round of sixteen, quarter-finals,
	semi-finals, third place match, final. Note that not all values are applicable to all tournaments.

group_name text The name of the group.

referee_id text The unique ID number for the referee. References

referee_id in the referees dataset.

family_name text The family name of the referee.

given_name text The given name of the referee.

country_name text The name of the referee's home country.

confederation_id text The unique ID number for the confederation. References

confederation_id in the confederations dataset.

confederation_name text The name of the confederation.

confederation_code text The abbreviation for the confederation.

goals

Goals

Description

This dataset records all goals. There is one observation per goal. It indicates the team that scored the goal, player who scored the goal, the team of the player who scored the goal (to account for own goals), minute of the goal, and whether the goal was scored in the run of play by the opposition, was an own goal, or was a penalty. This dataset does not include converted penalties in a penalty shootout. There are 27 variables and 2548 observations.

key_id	integer The unique ID number for the observation.
goal_id	text The unique ID number for the goal. Has the format G-####, where the number is a counter that is assigned with the data sorted by the match ID, then the minute of the goal.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match in which the goal occurred. References match_id in the matches dataset.
match_name	text The name of the match in which the goal occurred.

match_date	date The date of the match in the format YYYY-MM-DD.
stage_name	enum The stage of the tournament in which the match occurred. The possible values are: first round, second round, group stage, round of sixteen, quarter-finals, semi-finals, third place match, final. Note that not all values are applicable to all tournaments.
group_name	text The name of the group.
team_id	text The unique ID number for the team that scored the goal. References team_id in the teams dataset. For own goals, this is the team that is awarded the goal, not the team of the player who scored the own goal.
team_name	text The name of the team of the player who scored the goal.
team_code	text The 3-letter code for the team of the player who scored the goal.
home_team	boolean Whether the team was the home team. Coded 1 if the team was the home team and 0 otherwise.
away_team	boolean Whether the team was the away team. Coded 1 if the team was the away team and 0 otherwise.
player_id	text The unique ID number for the player who scored the goal. References player_id in the players dataset.
family_name	text The family name of the player who scored the goal.
given_name	text The given name of the player who scored the goal.
shirt_number	integer The shirt number of the player who scored the goal.
player_team_id	text The unique ID number for the team of the player who scored the goal. References team_id in the teams dataset. For own goals, this is the team of the player who scored the own goal, not the team that is awarded the goal.
player_team_name	text The name of the team of the player who scored the goal.

text The 3-letter code for the team of the player who scored the player_team_code goal. minute_label text The minute of the match in which the goal occurred in the format #' or #'+#'. minute_regulation integer The minute of regulation time in which the substitution occurred. integer The minute of stoppage time in which the goal minute_stoppage occurred. Coded 0 if the substitution did not occur during stoppage time. match_period enum The period of the match in which the goal occurred. The possible values are: first half, first half, stoppage time, second half, second half, stoppage time, extra time, first half, extra time, first half, stoppage time, extra time, second half, extra time, second half, stoppage time, after extra time. boolean Whether the goal was an own goal. Coded 1 if the own_goal goal was an own goal and 0 otherwise. penalty boolean Whether the goal was a penalty that occurred during the game, as opposed to during a penalty shootout. Coded 1 if the goal was a penalty that occurred during the game and 0 otherwise.

penalty_kicks

Penalty kicks

Description

This dataset records all penalty kicks taken during penalty shootouts. There is one observation per penalty kick. This dataset does not include attempted penalty kicks during matches. It indicates minute of each kick, the player who took the kick, and whether the penalty was converted. There are 19 variables and 279 observations.

key_id	integer The unique ID number for the observation.
penalty_kick_id	text The unique ID number for the penalty kick. Has the format PK-####, where the number is a counter that is assigned with the data sorted by the match ID, then the minute of the penalty kick.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match in which the penalty kick occurred. References match_id in the matches dataset.
match_name	text The name of match in which the penalty kick occurred.
match_date	date The date of the match in the format YYYY-MM-DD .

stage_name	enum The stage of the tournament in which the match occurred. The possible values are: first round, second round, group stage, round of sixteen, quarter-finals, semi-finals, third place match, final. Note that not all values are applicable to all tournaments.
group_name	text The name of the group.
team_id	text The unique ID number for the team of the player who took the penalty kick. References team_id in the teams dataset.
team_name	text The name of the team of the player who took the penalty kick.
team_code	text The 3-letter code for the team of the player who took the penalty kick.
home_team	boolean Whether the team was the home team. Coded 1 if the team was the home team and 0 otherwise.
away_team	boolean Whether the team was the away team. Coded 1 if the team was the away team and 0 otherwise.
player_id	text The unique ID number for the player who took the penalty kick. References player_id in the players dataset.
family_name	text The family name of the player who took the penalty kick.
given_name	text The given name of the player who took the penalty kick.
shirt_number	integer The shirt number of the player who took the penalty kick.
converted	boolean Whether the penalty kick was converted. Coded 1 if the penalty kick was converted and 0 otherwise.

bookings

Bookings

Description

This dataset records all bookings, including yellow cards and red cards, since 1970. The modern system of yellow and red cards was introduced in 1970. There is one observation per booking. It indicates the minute of each booking, the player who was booked, whether the booking was a yellow card or a red card, whether the card was a second yellow card, and whether the player was sent off as a result of the booking. There are 26 variables and 2466 observations.

key_id	integer The unique ID number for the observation.
booking_id	text The unique ID number for the booking. Has the format B-####, where the number is a counter that is assigned with the data sorted by the match ID, then the minute of the booking.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match in which the booking occurred. References match_id in the matches dataset.
match_name	text The name of the match in which the booking occurred.

match_date date The date of the match in the format YYYY-MM-DD. stage_name enum The stage of the tournament in which the match occurred. The possible values are: first round, second round, group stage, round of sixteen, quarter-finals, semi-finals, third place match, final. Note that not all values are applicable to all tournaments. text The name of the group. group_name team_id text The unique ID number for the team of the player who was booked. References team_id in the teams dataset. text The name of the team of the player who was booked. team_name team_code text The 3-letter code for the team of the player who was booked. home_team boolean Whether the team was the home team. Coded 1 if the team was the home team and ootherwise. boolean Whether the team was the away team. Coded 1 if the away_team team was the away team and 0 otherwise. player_id text The unique ID number for the player who was booked. References player_id in the players dataset. text The family name of the player who was booked. family_name text The given name of the player who was booked. given_name shirt_number integer The shirt number of the player who was booked. minute_label text The minute of the match in which the booking occurred in the format #' or #'+#'. minute_regulation integer The minute of regulation time in which the booking occurred.

minute_stoppage integer The minute of stoppage time in which the booking

occurred. Coded 0 if the substitution did not occur during

stoppage time.

match_period enum The period of the match in which the booking occurred.

The possible values are: first half,

first half, stoppage time, second half,

second half, stoppage time, extra time, first half,

extra time, first half, stoppage time,

extra time, second half,

extra time, second half, stoppage time,

after extra time.

yellow_card boolean Whether the booking was a yellow card. Coded 1 if

the card is a yellow card and 0 otherwise.

red_card boolean Whether the booking was a red card. Coded 1 if the

card is a red card and 0 otherwise.

second_yellow_card boolean Whether the booking was a second yellow card. Coded

1 if the booking is a second yellow and 0 otherwise.

sending_off boolean Whether the booking resulted in the player being sent

off. Coded 1 if the player was sent off and 0 otherwise.

substitutions

Substitutions

Description

This dataset records all substitutions since 1970. FIFA match reports do not include information about substitutions before 1970. There is one observation per player per substitution. It indicates the minute of the substitution, the player who went off, and the player who came on. There are 24 variables and 6464 observations.

key_id	integer The unique ID number for the observation.
substitution_id	text The unique ID number for the substitution. Has the format S-####, where the number is a counter that is assigned with the data sorted by the match ID, then the minute of the substitution, then whether the player is going off.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
match_id	text The unique ID number for the match in which the substitution occurred. References match_id in the matches dataset.
match_name	text The name of the match in which the substitution occurred.

match_date date The date of the match in the format YYYY-MM-DD. stage_name enum The stage of the tournament in which the match occurred. The possible values are: first round, second round, group stage, round of sixteen, quarter-finals, semi-finals, third place match, final. Note that not all values are applicable to all tournaments. text The name of the group. group_name team_id text The unique ID number for the team of the player who was substituted. References team_id in the teams dataset. text The name of the team of the player who was substituted. team_name team_code text The 3-letter code for the team of the player who was substituted. home_team boolean Whether the team was the home team. Coded 1 if the team was the home team and ootherwise. boolean Whether the team was the away team. Coded 1 if the away_team team was the away team and 0 otherwise. player_id text The unique ID number for the player who was substituted. References player_id in the players dataset. text The family name of the player who was substituted. family_name text The given name of the player who was substituted. given_name shirt_number integer The shirt number of the player who was substituted. minute_label text The minute of the match in which the substitution occurred in the format #' or #'+#'. minute_regulation integer The minute of regulation time in which the substitution occurred.

integer The minute of stoppage time in which the substitution minute_stoppage occurred. Coded 0 if the substitution did not occur during stoppage time. match_period enum The period of the match in which the substitution occurred. The possible values are: first half, first half, stoppage time, second half, second half, stoppage time, extra time, first half, extra time, first half, stoppage time, extra time, second half, extra time, second half, stoppage time, after extra time. going_off boolean Whether the player was going off the field. Coded 1 if the player was going off and 0 otherwise. boolean Whether the player was coming on the field. Coded 1 coming_on if the player was coming on and 0 otherwise.

host_countries

Host countries

Description

This dataset records all host countries. There is one observation per host country per tournament. A tournament can have multiple host countries. It indicates the performance of each host country (the furthest stage reached). There are 7 variables and 22 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
team_id	text The unique ID number for the team. References team_id in the teams dataset.
team_name	text The name of the team.
team_code	text The 3-letter code for the team.
performance	text The furthest stage of the tournament reached by the host country's team.

tournament_stages

Tournament stages

Description

This dataset records the stages in each tournament. There is one observation per stage per tournament. It indicates the name of the stage, whether the stage was a group stage or a knockout stage, if the stage was a group stage, whether there were unbalanced groups, the start and end dates of the stage, and how many matches there were in the stage, how many teams participated in each stage, how many games were scheduled, how many replays there were, how many walkovers there were, and how many playoffs there were. There are 16 observations and 107 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
stage_number	integer The number of the stage.
stage_name	enum The stage of the tournament in which the match occurred.
	The possible values are: first round , second round ,
	group stage, round of sixteen, quarter-finals,
	semi-finals , third place match , final . Note that not all
	values are applicable to all tournaments.

group_stage	boolean Whether the match is a group stage match. Coded 1 if the match is a group stage match and 0 otherwise.
knockout_stage	boolean Whether there was a knockout stage. Coded 1 if there was a knockout stage and 0 otherwise.
unbalanced_groups	boolean Whether there were unbalanced groups. Coded 1 if there were unbalanced groups and 0 otherwise.
start_date	date The start date of the stage in the format YYYY-MM-DD.
end_date	date The end date of the stage in the format YYYY-MM-DD .
count_matches	integer The number of matches in the stage.
count_teams	integer The number of teams that participated in the stage.
count_scheduled	integer The number of games that were scheduled in the stage.
count_replays	integer The number of replays in the stage.
count_playoffs	integer The number of playoff games in the stage.
count_walkovers	integer The number of walkovers in the stage.

groups

Groups

Description

This dataset records the names of the groups for each group stage. There is one observation per group per group stage per tournament. Some tournaments have multiple group stages. It indicates the stage, the name of the group, and how many teams were in the group. There are 7 variables and 117 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
stage_number	integer The number of the stage.
stage_name	enum The stage of the tournament in which the match occurred. The possible values are: first round, second round, group stage, round of sixteen, quarter-finals, semi-finals, third place match, final. Note that not all values are applicable to all tournaments.
group_name	text The name of the group.

count_teams in the group.

group_standings

Group standings

Description

This dataset records group standings for each group stage. There is one observation per team per group per group stage per tournament. Some tournaments have multiple group stages. It includes the final position of the team (factoring in tie breakers), the name of the team, the number of matches played, the number of wins, the number of losses, the number of draws, the number of goals for, the number of goals against, the goal difference, the total number of points earned, and whether the team advanced out of the group. There are 19 variables and 458 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
stage_number	integer The number of the stage.
stage_name	enum The stage of the tournament in which the match occurred. The possible values are: first round, second round, group stage, round of sixteen, quarter-finals, semi-finals, third place match, final. Note that not all
	values are applicable to all tournaments.

text The name of the group. group_name position integer The team's final position in the group. team_id text The unique ID number for the team. References team_id in the teams dataset. text The name of the team. team_name team_code text The 3-letter code for the team. integer The number of matches that the team played in the played group. wins integer The number of matches that the team won in the group stage. integer The number of matches that the team drew in the draws group stage. losses integer The number of matches that the team lost in the group stage. integer The number of goals scored by the team in the group goals_for stage. integer The number of goals scored against the team in the goals_against group stage. integer The team's goal difference in the group stage. goal_difference points integer The number of points that the team earned in the group. advanced boolean Whether the team advanced out of the group. Coded 1 if the team advanced and 0 otherwise.

tournament_standings

Tournament standings

Description

This dataset records the final standings for each tournament. There is one observation per position per tournament. The top four teams are ranked. In most tournaments, these are the winner of the final, the loser of the final, the winner of the third-place match, and the loser of the third-place match. There are 7 variables and 84 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
position	integer The place of the team in the final standings.
team_id	text The unique ID number for the team. References team_id in the teams dataset.
team_name	text The name of the team.
team_code	text The 3-letter code for the team.

award_winners

Award winners

Description

This dataset records all award winners. There is one observation per player per award per tournament. Some awards are shared by multiple players. It indicates the name of the award, the player(s) who won the award, the team of the player(s) who won the award, and whether the award was shared. There are 12 variables and 133 observations.

key_id	integer The unique ID number for the observation.
tournament_id	text The unique ID number for the tournament. References tournament_id in the tournaments dataset.
tournament_name	text The name of the tournament.
award_id	text The unique ID number for the award. References award_id in the awards dataset.
award_name	enum The name of the award. The possible values are: Golden Ball , Silver Ball , Bronze Ball , Golden Boot , Silver Boot , Bronze Boot , Golden Glove , Best Young Player .
shared	boolean Whether the award was shared between multiple players. Coded 1 if the award was shared and 0 otherwise.

rest The unique ID number for the player who won the award.

References player_id in the players dataset.

family_name

text The family name of the player who won the award.

given_name

text The given name of the player who won the award.

team_id

text The unique ID number for the team. References team_id
in the teams dataset.

team_name

text The name of the team of the player who won the award.

team_code

text The 3-letter code for the team of the player who won the award.