Ergast Database User Guide Version: 1.0 Date: 31 January 2021 Author: Chris Newell

List of Tables circuits constructorResults constructorStandings constructors driverStandings drivers lapTimes pitStops qualifying races results seasons status

General Notes Dates, times and durations are in ISO 8601 format Dates and times are UTC Strings use UTF-8 encoding Primary keys are for internal use only Fields ending with "Ref" are unique identifiers for external use A grid position of '0' is used for starting from the pitlane Labels used in the positionText fields: "D" - disqualified "E" - excluded "F" - failed to qualify "N" - not classified "R" - retired "W" - withdrew

circuits table

| Field Type Null Key Default Extra Description | | _ L _ | | L J | L | _ | |
|--|--|--|---------------------------|-----|------------------------------|----------------|--|
| circuitRef varchar(255) NO Unique circuit identifier name varchar(255) NO Circuit name location varchar(255) YES NULL Location name country varchar(255) YES NULL Country name lat float YES NULL Latitude longitude | Field | Type | Null | Key | Default | Extra | Description |
| url | circuitRef name location country lat lng alt | <pre>varchar(255) varchar(255) varchar(255) varchar(255) float float int(11)</pre> | NO NO YES YES YES YES YES | | NULL NULL NULL NULL | auto_increment | Unique circuit identifier Circuit name Location name Country name Latitude Longitude Altitude (metres) |

constructor_results table

| | | L - | | L - | | _ |
|-----------------------------|----------------------|------------|---------|-------------|----------------|---|
| Field | Type | Null | Key | Default | Extra | Description |
| constructorResultsId raceId | int(11) int(11) | NO NO | PRI | NULL 0 | auto_increment | Primary key Foreign key link to races table |
| constructorId | int(11) | NO | ĺ | 0 | | Foreign key link to constructors table |
| points | float | YES | | NULL | | Constructor points for race |
| status | varchar(255) | VES | į i | NIIT.T. | | "D" for disqualified (or null) |

| constructor_standings tab | le | | 1 | | | |
|---------------------------|----------------|------|-----------|-------------|----------------|--|
| Field | туре Туре | Null | Key | Default | Extra | Description |
| constructorStandingsId | | NO | PRI | + NULL | auto increment | Primary key |
| raceId | int(11) | NO | İ | 0 | <u> </u> | Foreign key link to races table |
| constructorId | int(11) | NO | İ | 0 | | Foreign key link to constructors table |
| points | float | NO | ĺ | 0 | | Constructor points for season |
| position | int(11) | YES | ĺ | NULL | | Constructor standings position (integer) |
| positionText | varchar(255) | YES | | NULL | | Constructor standings position (string) |
| wing | in+(11) | NO | 1 | l 0 | 1 | Soason win count |

constructors table

| + | | + | + | | | + |
|---|--|-----------------|-----------------------------|--------------|----------------|---|
| Field | Туре | Null + | Key | Default | Extra | Description |
| constructorId constructorRef name nationality url | <pre>int(11) varchar(255) varchar(255) varchar(255) varchar(255)</pre> | NO NO NO NO YES | PRI UNI | NULL NULL | auto_increment | Primary key Unique constructor identifier Constructor name Constructor nationality Constructor Wikipedia page |

driver_standings table

| numberint(11)YESNULLPermanent driver numbercodevarchar(3)YESNULLDriver code e.g. "ALO"forenamevarchar(255)NODriver forenamesurnamevarchar(255)NODriver surnamedobdateYESNULLDriver date of birth | Field | Туре | Null | Key | Default | Extra | Description |
|--|--|--|--------------------------|-----|--------------|---|--|
| url varchar(255) YES NOLL Driver Nationality url Driver Wikipedia page | driverRef number code forename surname dob nationality | <pre>varchar(255) int(11) varchar(3) varchar(255) varchar(255) date varchar(255)</pre> | NO YES YES NO NO YES YES | | NULL NULL | + auto_increment | Unique driver identifier Permanent driver number Driver code e.g. "ALO" Driver forename Driver surname Driver date of birth Driver nationality |

| Field + | Type | Null | Key | Default | Extra | Description |
|--|---|--|-----------------------|--------------------------|-------|---|
| raceId driverId lap position time milliseconds | int(11) int(11) int(11) int(11) varchar(255) int(11) | NO NO NO NO NO NO NO NO NO NO NO NO NO N | PRI PRI PRI PRI | NULL NULL NULL NULL NULL | | Foreign key link to races table Foreign key link to drivers table Lap number Driver race position Lap time e.g. "1:43.762" Lap time in milliseconds |

Field

| Field | Type | Null | Key | Default | Extra | Description |
|-------------------------------|--|------------------------------------|-----------------------------|--------------------------|-----------------------|---|
| raceId driverId stop lap time | int(11) int(11) int(11) int(11) time | NO NO NO NO NO | PRI PRI PRI | NULL NULL NULL NULL NULL | | Foreign key link to races table Foreign key link to drivers table Stop number Lap number Time of stop e.g. "13:52:25" |
| duration milliseconds | varchar(255) int(11) | YES YES + | | NULL NULL | | Duration of stop e.g. "21.783" Duration of stop in milliseconds |

qualifying table

| Field | Type | Null | Key | Default - | Extra | Description |
|--|--|-----------------------------|-----|----------------------------------|----------------|--|
| qualifyId raceId driverId constructorId number position q1 q2 q3 | <pre>int(11) int(11) int(11) int(11) int(11) int(11) varchar(255) varchar(255)</pre> | NO NO NO NO YES YES YES YES | PRI | NULL 0 0 0 0 NULL NULL NULL NULL | auto_increment | Primary key Foreign key link to races table Foreign key link to drivers table Foreign key link to constructors table Driver number Qualifying position Q1 lap time e.g. "1:21.374" Q2 lap time Q3 lap time |

races table

| Field | Type | Null | Key | Default | Extra | Description |
|-------------|--------------|------|------------|------------|----------------|------------------------------------|
| raceId | int(11) | NO | r PRI | NULL | auto_increment | Primary key |
| year | int(11) | NO | | 0 | _ | Foreign key link to seasons table |
| round | int(11) | NO | | 0 | | Round number |
| circuitId | int(11) | NO | | 0 | | Foreign key link to circuits table |
| name | varchar(255) | NO | | | | Race name |
| date | date | NO | | 0000-00-00 | | Race date e.g. "1950-05-13" |
| time | time | YES | | NULL | | Race start time e.g."13:00:00" |
| url | varchar(255) | YES | UNI | NULL | | Race Wikipedia page |
| fp1_date | date | YES | | NULL | | FP1 date |
| fp1_time | time | YES | | NULL | | FP1 start time |
| fp2_date | date | YES | | NULL | | FP2 date |
| fp2_time | time | YES | | NULL | | FP2 start time |
| fp3_date | date | YES | | NULL | | FP3 date |
| fp3_time | time | YES | | NULL | | FP3 start time |
| quali_date | date | YES | | NULL | | Qualifying date |
| quali_time | time | YES | | NULL | | Qualifying start time |
| sprint_date | date | YES | | NULL | | Sprint date |
| sprint_time | time | YES | | NULL | | Sprint start time |
| T | r | T | | r | T | TT |

results table

| Field | Туре | Null | Key | Default | Extra | Description |
|-----------------|--------------|------|------------|-------------|----------------|---|
| resultId | | NO | + PRI | + NULL | auto increment | + Primary key |
| raceId | int(11) | NO | j | 0 | _ | Foreign key link to races table |
| driverId | int(11) | NO | j | 0 | | Foreign key link to drivers table |
| constructorId | int(11) | NO | j | 0 | | Foreign key link to constructors table |
| number | int(11) | YES | j | NULL | | Driver number |
| grid | int(11) | NO | j | 0 | | Starting grid position |
| position | int(11) | YES | j | NULL | | Official classification, if applicable |
| positionText | varchar(255) | NO | j | İ | | Driver position string e.g. "1" or "R" |
| positionOrder | int(11) | NO | j | 0 | | Driver position for ordering purposes |
| points | float | NO | ĺ | 0 | | Driver points for race |
| laps | int(11) | NO | ĺ | 0 | | Number of completed laps |
| time | varchar(255) | YES | ĺ | NULL | | Finishing time or gap |
| milliseconds | int(11) | YES | ĺ | NULL | | Finishing time in milliseconds |
| fastestLap | int(11) | YES | ĺ | NULL | | Lap number of fastest lap |
| rank | int(11) | YES | j | 0 | | Fastest lap rank, compared to other drivers |
| fastestLapTime | varchar(255) | YES | İ | NULL | | Fastest lap time e.g. "1:27.453" |
| fastestLapSpeed | varchar(255) | YES | İ | NULL | | Fastest lap speed (km/h) e.g. "213.874" |
| statusId | int(11) | NO | j | 0 | | Foreign key link to status table |

| sprint_results tab | le | L _ | | L | | |
|--|---|--|-----|--|----------------|---|
| Field + | | Null | Key | Default | | Description |
| sprintResultId raceId driverId constructorId number grid position positionText positionOrder points laps time milliseconds fastestLap fastestLapTime | int(11) int(11) int(11) int(11) int(11) int(11) int(11) varchar(255) int(11) float int(11) varchar(255) int(11) varchar(255) | NO NO NO YES NO NO NO NO YES YES YES YES | PRI | NULL 0 0 0 NULL 0 NULL 0 0 NULL NULL | auto_increment | Primary key Foreign key link to races table Foreign key link to drivers table Foreign key link to constructors table Driver number Starting grid position Official classification, if applicable Driver position string e.g. "1" or "R" Driver position for ordering purposes Driver points for race Number of completed laps Finishing time or gap Finishing time in milliseconds Lap number of fastest lap Fastest lap time e.g. "1:27.453" |
| statusId | int(11) ` ´ | NO | | 0 | | Foreign key link to status table |

Primary key e.g. 1950

| Season Wikipedia page

seasons table

year

url

| int(11)

| varchar(255) | NO

| ++ | | + | + | + | + | + | |
|-----------|-------------|------|-----------|----------------|--------------|--------------------|-------|
| status ta | ble | | | | | | |
| + | + Type | Null | Key | + Default | + Extra | + Description | + |

Null | Key | Default | Extra | Description

PRI | 0

| UNI |

| Field Typ | | ull Key | ' | Extra | Description | |
|--------------|---|-----------|---|----------------|-------------|--|
| statusId int | : | O PRI | : | auto_increment | | |