Tournament creator

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Relational Databases

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# Business Description

Tournament Creator is a gaming platform that allows players to test their abilities and skills in a determined group of games. We are dedicated to offering the best experience at a higher group level including popular locations, modern venues, and excellent organization.

Having hosted tournaments in Rio De Janeiro, Malta, Sweden, Columbus, Katowice, Cologne, Cluj-Napoca, Krakow, Berlin and Antwerp we have plenty of experience in travelling around the world and our team of organizers dispose of excellent organizational skills, making sure they offer you, your team and the spectators an unforgettable experience. All you must do is sign your team up! Your team must have a name, country and certain statistics such as ranking, earnings and number of matches played must be made public. For each team player, the following data is required: full name, country of origin, age, in-game nickname, rank, and team role. Optionally, the player can choose to show his inventory value and number of hours played.

With every new tournament edition, we bring better and bigger prizes to the table. Awards will go out to the top 3 teams. First team will receive a monetary prize varying on how many teams and spectators participated. The second and third qualified teams will receive prizes consisting of gaming gear such as headsets, keyboards, mice, monitors and microphones.

Each tournament follows one set structure: 4 matches played simultaneously (two teams in each match) using 40 high-end computers provided by us. After the first sets of matches are completed, semi-finals follow and after, the grand finale.

Certain rules must be followed in order to assure the well going of each tournament. Due to the fact that our tournaments are hosted in different countries, these rules mostly depend on location, but we have a set of rules that need to be followed at all times. The following rules are: be respectful towards your opponents (no racism, no profanity, no provocative gestures), show up on time and play all of your assigned matches. Each participant must be over the age of 14 and provide a form of ID as proof of age otherwise he will be automatically rejected. Each individual participant must ensure they have the necessary documents to travel to the country where the tournament is taking place. Players are **not** allowed to bring their own peripherals; each player will be provided the required peripherals. All players can bring their own configuration file, which will be subjected to close inspection in case any software is hidden inside it. A tournament will have a **participating fee**, which each team will have to pay in order to take part. Failure to respect and comply to these rules will result in your team being disqualified from the tournament.

Thank you for taking the time to read! We are waiting for you and your team to sign-up and see if you can be the best!

# ER Diagram

Diagram

Description automatically generated

Figure - ER Diagram with modifications applied

# Table Mapping

This section contains a table mapping diagram for each entity all attributes, constraints, datatypes and sizes being listed.

**Tournament**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| tournamentID | Pk | INT | 10 |  | \* |
| tournamentName |  | VARCHAR | 50 |  | \* |
| location |  | VARCHAR | 30 |  | \* |
| tournamentDate |  | DATE |  |  | \* |
| prizeAmount |  | INT | 7 |  | \* |
| fee |  | INT | 4 |  | \* |

**Prize**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| prizeID | Pk | INT | 10 |  | \* |
| fk\_trnm | Fk | INT | 10 |  | \* |
| amount |  | INT | 6 |  | \* |
| dscp |  | CHAR | 50 |  | \* |
| lvl |  | INT | 1 |  | \* |

**Place**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| pos | Pk | INT | 2 |  | \* |
| fk\_trnm | Fk | INT | 10 |  | \* |
| fk\_team | Fk | INT | 7 |  | \* |

**Match**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| matchID | Pk | INT | 10 |  | \* |
| fk\_trnm | Fk | INT | 10 |  | \* |
| fk\_map | Fk | INT | 7 |  | \* |
| fk\_team | Fk | INT | 7 |  | \* |
| matchDate |  | DATE |  |  | \* |
| winner |  | CHAR | 20 |  | \* |

**Map**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| mapID | Pk | INT | 7 |  | \* |
| fk\_trnm | Fk | INT | 10 |  | \* |
| mapName |  | CHAR | 15 |  | \* |
| dscp |  | CHAR | 100 |  | \* |
| creator |  | CHAR | 20 |  | \* |

**Team**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| teamID | Pk | INT | 7 |  | \* |
| teamName |  | CHAR | 10 |  | \* |
| country |  | CHAR | 20 |  | \* |
| ranking |  | INT | 4 |  | \* |
| earnings |  | INT | 8 |  | \* |
| noOfMatches |  | INT | 5 |  | \* |

**Player**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| playerID | Pk | INT | 7 |  | \* |
| fk\_team | Fk | INT | 7 |  | \* |
| fullName |  | CHAR | 30 |  | \* |
| country |  | CHAR | 20 |  | \* |
| nick |  | CHAR | 10 |  | \* |
| inventoryValue |  | FLOAT | (8,2) |  | o |
| hoursPlayed |  | INT | 5 |  | o |

**Passport**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| passportNo | Pk | INT | 13 |  | \* |
| fk\_playerID | Fk | INT | 7 |  |  |
| placeOfBirth |  | CHAR | 20 |  | \* |
| expiryDate |  | DATE |  |  | \* |
| nationality |  | CHAR | 10 |  | \* |
| dob |  | DATE |  |  | \* |

**ID Card**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column name** | **Key type** | **Data Type** | **Size** | **Description** | **optionality** |
| cardNo | Pk | INT | 13 |  | \* |
| fk\_playerID | Fk | INT | 7 |  |  |
| homeCity |  | CHAR | 20 |  | \* |
| expiryDate |  | DATE |  |  | \* |
| nationality |  | CHAR | 10 |  | \* |
| dob |  | CHAR | 30 |  | \* |

# Normalized Tables

**Tournaments**(tournamentID#, tournamentName, location, tournamentDate, prizeAmount, fee)

**Prizes**(prizeID#, fk\_trnm, amount, dscp, lvl)

**Places**(pos#, fk\_trnm, fk\_team)

**Matches**(matchID#, fk\_trnm, fk\_map, fk\_team, matchDate, winner)

**Maps**(mapID#, fk\_trnm, mapName, dscp, creator)

**Teams**(teamID#, teamName, country, ranking, earnings, noOfMatches)

**Players**(playerID#, fk\_team, fullName, country, nick, inventoryValue, hoursPlayed)

**Passport**(passportNo#, fk\_playerID, placeOfBirth, expiryDate, nationality, dob)

**ID Card**(cardNo#, fk\_playerID, homeCity, expiryDate, nationality, dob)

# Select Statements

* IDProof statements: used by organizers to ensure that every player has a form of identification complying to tournament rules.
* Team statements: used by organizers, team leader, team coach, players and presenters to get information on teams
* Count statements: used by organizer to keep track of how many players and teams take part in the tournament
* Inventory statements: used by presenters, organizers and most importantly promoters to retrieve information about each player’s inventory value and who they could sponsor
* Tournament statements: used by organizers to display rankings of a tournament and distribute prizes according to these rankings
* Database select: used by support team to know what database they are inserting data into