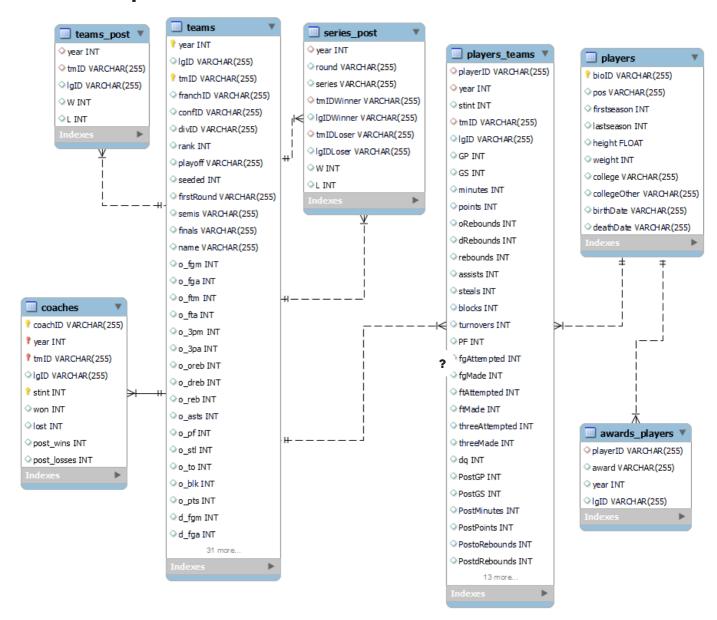
FEUP-M.EIC001-2023/2024-1S

## **Task description**

Basketball tournaments are usually split in two parts. First, all teams play each other aiming to achieve the greatest number of wins possible. Then, at the end of the first part of the season, a pre determined number of teams which were able to win the most games a qualified to the playoff season, where they play series of knock-out matches for the trophy.

For the 10 years, data from players, teams, coaches, games and several other metrics were gathered and arranged on this dataset. To is to use this data to predict which teams will qualify for the playoffs in the next season.

#### **Data description**



The data about the players, teams and coaches consist of following relations:

- relation awards\_players (96 objects) each record describes awards and prizes received by players across 10 seasons,
- relation coaches (163 objects) each record describes all coaches who've managed the teams during the time period,
- relation players (894 objects) each record contains details of all players,
- relation players\_teams (1877 objects) each record describes the performance of each player for each team they played,
- relation series\_post (71 objects) each record describes the series' results,

- relation teams (143 objects) each record describes the performance of the teams for each season,
- relation teams\_post (81 objects) each record describes the results of each team at the post-season.

Each account has both static characteristics (e.g. date of creation, address of the branch) given in relation "account" and dynamic characteristics (e.g. payments debited or credited, balances) given in relations "permanent order" and "transaction". Relation "client" describes characteristics of persons who can manipulate with the accounts. One client can have more accounts, more clients can manipulate with single account; clients and accounts are related together in relation "disposition". Relations "loan" and "credit card" do some services which the bank offers to its clients; more credit cards can be issued to an account, at most one loan can be granted for account. Relation "demographic data" gives some publicly available information about the districts (e.g. the unemployment rate); additinformation about the clients can be deduced from this.

#### **Relation account**

| item        | meaning                             | remark             |
|-------------|-------------------------------------|--------------------|
| account_id  | identification of the account       | -                  |
| district_id | location of the branch              | -                  |
| date        | date of creating of the account     | in the form YYMMDD |
| frequency   | frequency of issuance of statements | -                  |

# Relation client

\_

| item         | meaning                      | remark   |
|--------------|------------------------------|--|
| client_id    | <del>client identifier</del> | -  |
| birth number | <del>birthday and sex</del>  | the number is in the form YYMMDD for men, the number is in the form YYMM+50DD for women, where YYMMDD is the date of birth |
| district_id  | address of the client        | _  |

## **Relation disposition**

| item               | meaning                          | remark   |
|--------------------|----------------------------------|--|
| <del>disp_id</del> | record identifier                | -  |
| client_id          | identification of a client       | -  |
| account_id         | identification of an account     | -  |
| type               | type of disposition (owner/user) | only owner can issue permanent orders and ask for a loan |

#### Relation permanent order (debits only)

| item               | meaning                                    | remark                               |
|--------------------|--|--------------------------------------|
| order_id           | record identifier                          | -                                    |
| account_id         | account, the order is issued for           | -                                    |
| <del>bank_to</del> | <del>bank of the recipient</del>           | each bank has unique two letter code |
| account_to         | account of the recipient                   | -                                    |
| amount             | debited amount                             | -                                    |
| K_symbol           | <del>characterization of the payment</del> | -                                    |

### **Relation Transaction**

\_

| item                 | meaning  | remark                               |
|----------------------|--|--------------------------------------|
| trans_id             | record identifier                              | -                                    |
| account_id           | account, the transation deals with             | -                                    |
| <del>date</del>      | date of transaction                            | in the form YYMMDD                   |
| type                 | +/ transaction                                 | -                                    |
| <del>operation</del> | mode of transaction                            | -                                    |
| amount               | amount of money                                | -                                    |
| balance              | <del>balance after transaction</del>           |                                      |
| k_symbol             | <del>characterization of the transaction</del> | -                                    |
| <del>bank</del>      | <del>bank of the partner</del>                 | each bank has unique two letter code |
| account              | account of the partner                         | -                                    |

#### **Relation Loan**

| item               | meaning   | remark   |
|--------------------|---|--|
| <del>loan_id</del> | record identifier                                       | -  |
| account_id         | identification of the account                           | -  |
| <del>date</del>    | <del>date when the loan</del><br><del>was granted</del> | in the form YYMMDD   |
| amount             | amount of money   | -  |
| duration           | <del>duration of the loan</del>                         | -  |
| payments           | monthly payments  | -  |
| status             | status of paying off<br>the loan                        | 'A' stands for contract finished, no problems, 'B' stands for contract finished, loan not payed, 'C' stands for running contract, OK so far, 'D' stands for running contract, client in debt |

### **Relation Credit card**

| item               | meaning                   | remark   |
|--------------------|---------------------------|--|
| <del>card_id</del> | record identifier         | -  |
| <del>disp_id</del> | disposition to an account | -  |
| type               | type of card              | <del>possible values are "junior", "classic", "gold"</del> |
| issued             | <del>issue date</del>     | in the form YYMMDD   |

# **Relation Demographic data**

| item             | meaning                                      | remark |
|------------------|--|--------|
| A1 = district_id | <del>district code</del>                     | -      |
| <del>A2</del>    | <del>district name</del>                     | -      |
| <del>A3</del>    | region                                       | -      |
| A4               | no. of inhabitants                           | -      |
| <del>A5</del>    | no. of municipalities with inhabitants < 499 | -      |

| A6             | no. of municipalities with inhabitants 500-1999  | - |
|----------------|--|---|
| <del>A7</del>  | no. of municipalities with inhabitants 2000-9999 | - |
| A8             | no. of municipalities with inhabitants >10000    | - |
| <del>A9</del>  | no. of cities                                    | - |
| <del>A10</del> | ratio of urban inhabitants                       | - |
| <del>A11</del> | average salary                                   | - |
| <del>A12</del> | unemploymant rate '95                            | - |
| A13            | unemploymant rate '96                            | - |
| A14            | no. of enterpreneurs per 1000 inhabitants        | - |
| A15            | no. of committed crimes '95                      | - |
| A16            | no. of committed crimes '96                      | - |
|                |  |   |

Última alteração: terça-feira, 19 de setembro de 2023 às 08:17

■ Registration into project groups

basketball playoffs - development data

#### **Portais U.Porto**

Portal de e-learning Inovação Pedagógica AcademiaUP

#### **Ferramentas integradas**

Colibri Panopto Turnitin Wooclap

 $oxed{oxed}$  Contactar suporte do site  $oxed{oxed}$ 

© BY-NO-SA Creative Commons Requisitos mínimos de utilização