# Database project: Board games

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# 1. Specification

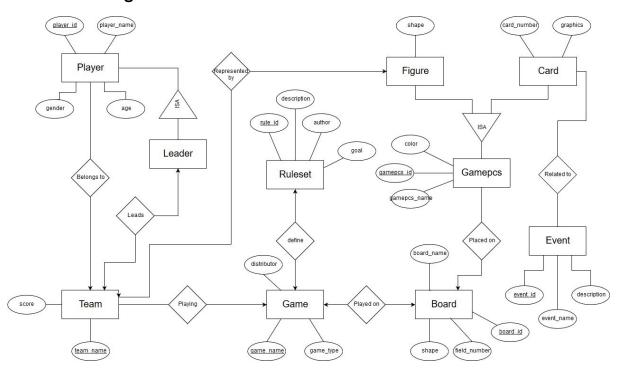
My project is demonstrating a database of a simple board game. Some games are based on pure strategy, others on logic and many contain an element of chance, or just purely chance.

Games can be played by teams. Each team is a group of players, has a unique name, and a selected player, who is the leader.

The main component of the game is the board, on which the game pieces are placed or moved. The game has special objects (game pieces) like figures, dice, cards, money, tokens etc. in my case only figures and cards. These pieces can represent, or belong to a player or a team. Some of these game pieces (like cards) can be related to events.

Every game has its own ruleset, which specifies a goal that a player or the teams has to achive for winning, define and govern the gameplay.

## 2. E/R diagram



## 3. Relational model

#### Entities and attributes

- Player(<u>player id</u>, name, gender, age, Team.team name)
- Leader(<u>player id</u>, name, gender, age)
- Team(<u>team\_name</u>, score, Leader.name, Game.game\_name, Figure.gamepcs\_id)

- Game(game\_name, game\_type, distributor, Ruleset.rule\_id)
- Board(<u>board\_id</u>, board\_name, shape, field\_number, Game.game\_name)
- Ruleset(<u>rule\_id</u>, description, author, goal)
- Gamepcs(gamepcs\_id, gamepcs\_name, color, Board.board\_id)
  - Gamepiece is an abstract class. The two children (Figure and Card) are in exclusive disjunction, so there is no entity, which can be Figure and Card at the same time.

Although gamepiece class cannot be instantiated, it makes easier to represent the "Placed on" relationship.

- Figure(gamepcs\_id, shape)
- Card(gamepcs id, card number, graphics)
- Event(<u>event\_id</u>, event\_name, description)

## Relationships

• Related\_to(<u>Card.gamepcs\_id</u>, <u>Event.event\_id</u>)

## 4. SQL CREATE, DROP

First of all, we have to call the DROP function for every single table we want to create, to be sure that there are no existing tables with our table names. These lines should appear at the end of the code also.

```
DROP TABLE player CASCADE CONSTRAINTS;
DROP TABLE leader CASCADE CONSTRAINTS;
DROP TABLE team CASCADE CONSTRAINTS;
DROP TABLE game CASCADE CONSTRAINTS;
DROP TABLE board CASCADE CONSTRAINTS;
DROP TABLE ruleset CASCADE CONSTRAINTS;
DROP TABLE figure CASCADE CONSTRAINTS;
DROP TABLE card CASCADE CONSTRAINTS;
DROP TABLE event CASCADE CONSTRAINTS;
DROP TABLE event CASCADE CONSTRAINTS;
DROP TABLE related to CASCADE CONSTRAINTS;
```

The next step is to create all these tables, by the relational model I have written it previously.

```
CREATE TABLE ruleset
(
    rule_id VARCHAR2(5) NOT NULL PRIMARY KEY,
    description VARCHAR(500) NOT NULL UNIQUE,
    author VARCHAR2(30) NOT NULL,
    goal VARCHAR(100) NOT NULL
);

CREATE TABLE game
(
    game_name VARCHAR2(30) NOT NULL PRIMARY KEY,
    game_type VARCHAR(15) NOT NULL,
    distributor VARCHAR(30) NOT NULL,
```

```
rule id VARCHAR2(5) NOT NULL UNIQUE,
      FOREIGN KEY(rule_id) REFERENCES ruleset(rule_id)
);
CREATE TABLE board
      board id VARCHAR2(5) NOT NULL PRIMARY KEY,
      board_name VARCHAR2(30) NOT NULL,
      shape VARCHAR2(10) NOT NULL,
      field number NUMBER,
      game name VARCHAR2(30) NOT NULL UNIQUE,
      FOREIGN KEY(game_name) REFERENCES game(game_name)
);
CREATE TABLE event
      event id VARCHAR2(5) NOT NULL PRIMARY KEY,
      event name VARCHAR(30) NOT NULL,
      description VARCHAR2(300) NOT NULL UNIQUE
);
CREATE TABLE figure
      gamepcs id VARCHAR2(5) NOT NULL PRIMARY KEY,
      gamepcs name VARCHAR2(30) NOT NULL,
      color VARCHAR2(15) NOT NULL,
      shape VARCHAR2(20) NOT NULL,
      board_id VARCHAR2(5) NOT NULL,
      FOREIGN KEY(board_id) REFERENCES board(board_id)
);
CREATE TABLE card
      gamepcs_id VARCHAR2(5) NOT NULL PRIMARY KEY,
      gamepcs name VARCHAR2(30) NOT NULL,
      color VARCHAR2(15) NOT NULL,
      card_number NUMBER,
      graphics VARCHAR2(40) NOT NULL,
      board id VARCHAR2(5) NOT NULL,
      FOREIGN KEY(board_id) REFERENCES board(board_id)
);
CREATE TABLE related to
    gamepcs_id VARCHAR2(5) NOT NULL,
```

```
FOREIGN KEY(gamepcs_id) REFERENCES card(gamepcs_id),
    FOREIGN KEY(event_id) REFERENCES event(event_id),
    PRIMARY KEY(gamepcs id, event id)
);
CREATE TABLE leader
      leader_id VARCHAR2(5) NOT NULL PRIMARY KEY,
      leader name VARCHAR2(30) NOT NULL,
      gender VARCHAR2(6) NOT NULL,
      age NUMBER
);
CREATE TABLE team
      team name VARCHAR2(30) NOT NULL PRIMARY KEY,
      score NUMBER DEFAULT 0,
      leader id VARCHAR2(5) NOT NULL UNIQUE,
      game_name VARCHAR2(30) NOT NULL,
      gamepcs id VARCHAR2(5) NOT NULL,
      FOREIGN KEY(leader_id) REFERENCES leader(leader_id),
      FOREIGN KEY(game_name) REFERENCES game(game_name),
      FOREIGN KEY(gamepcs id) REFERENCES figure(gamepcs id)
);
CREATE TABLE player
      player_id VARCHAR2(5) NOT NULL PRIMARY KEY,
      name VARCHAR2(30) NOT NULL,
      gender VARCHAR2(6) NOT NULL,
      age NUMBER,
      team name VARCHAR2(30) NOT NULL,
      FOREIGN KEY(team_name) REFERENCES team(team_name)
);
     Finally I have inserted values to these tables.
```

event id VARCHAR2(5) NOT NULL,

```
INSERT INTO ruleset VALUES('R1001', 'Every teams figure starts from a special field, the start field. They alternate roll the dice, and step forward. The teams have to make money. The most common way is to steal. Everyone has 500 euro for start. Most of the fields are related to plus or minus transactions.', 'Dan Brown', 'The first team, which has 5000 euros wins the game.');
INSERT INTO ruleset VALUES('R1002', 'Every teams figure starts from a special field, the start field. They alternate roll the dice, and step
```

```
forward. At special fields
the teams can draw a card.', 'Steve Author', 'The first team, which
reached the START field twice wins.');
INSERT INTO ruleset VALUES('R1003', 'The teams roll the dice, and which
has rolled the highest value has the right to hug someone, and step
forward. If a team
rolled the highest value twice, they have the right to draw a card.',
'Sophie Matrahill', 'The first team, which hugged all his friends
win.');
INSERT INTO ruleset VALUES('R1004', 'Every team gets a duckling at the
begenning. In each round every team thinks a number, and the team with
the highest number
can give a lesson to their duckling. After four lessons the duckling can
fly.', 'Edward Snowden', 'The first team which teaches his duckling to
fly wins.');
INSERT INTO ruleset VALUES('R1005', 'Every team gets a bunny at the
beggining. In each round every team throwsa figure at the table. Which
is the closest to the field with number 12 can
comb their bunny or draw a card.', 'Philip Giraffe', 'After ten rounds
the game is over. The team, which has the most fluffy bunny win the
game.');
INSERT INTO ruleset VALUES('R1006', 'Every teams figure starts from a
special field, the start field. They alternate roll the dice, and step
forward. The teams have
to make money. The most common way is to steal. Everyone has 500000 euro
for start. Most of the fields are related to plus or minus transactions.
If you reach the start, you get 500 euro.', 'Chris Brown', 'The first
team, which has 50000000 euros wins the game.');
INSERT INTO ruleset VALUES('R1007', 'Every team has to catch the
squirrel. The catch-time is documented. As many seconds it takes to
catch the squirrel, the team can go forward.', 'Kakasi Naruto', 'The
first team, which reached the START field, and love the squirrel
wins.');
INSERT INTO ruleset VALUES('R1008', 'The teams roll the dice, and which
has rolled the highest value has the right to hug someone who is hated
by him, and step forward. If a team
rolled the highest value twice, they have the right to draw a card.',
'Sophie Hatred', 'The first team, which hugged all his eneimies win.');
INSERT INTO ruleset VALUES('R1009', 'Every team has to sleep. After
every 10 hours of sleeping they can move forward. By drawing cards, they
can get more sleep pills.', 'Edward Snowden', 'The first team which
slept 10000 hours in sum, and reached the last field wins.');
INSERT INTO ruleset VALUES('R1010', 'Every team gets a pig at the
beggining. In each round every team throwsa figure at the table. Which
is the closest to the field with number 12 can
```

```
rounds the game is over. The team, which has the dirtiest pig win the
game.');
INSERT INTO game VALUES('MiniMonopoly', 'strategy', 'Fat Horse Games')
Inc.', 'R1001');
INSERT INTO game VALUES('Horse Race', 'race', 'Pear Industries Inc.',
'R1002');
INSERT INTO game VALUES('Hug Your Friend', 'logic', 'Penguin')
Entertainment Inc.', 'R1003');
INSERT INTO game VALUES('The Duckling Rush', 'race', 'Fat Horse Games
Inc.', 'R1004');
INSERT INTO game VALUES('Korean Bonnies', 'luck', 'Giraffe Neck Spots
Inc.', 'R1005');
INSERT INTO game VALUES('MegaMonopoly', 'strategy', 'Fat Horse Games
Inc.', 'R1006');
INSERT INTO game VALUES('Squirrel Catch', 'race', 'Beaver Industries
Inc.', 'R1007');
INSERT INTO game VALUES ('Hug Your Enemy', 'logic', 'Penguin
Entertainment Inc.', 'R1008');
INSERT INTO game VALUES('Sleep More', 'race', 'Lazy Duck Games Inc.',
'R1009');
INSERT INTO game VALUES('Hungarian Pigs', 'luck', 'Giraffe Neck Spots
Inc.', 'R1010');
INSERT INTO board VALUES('B1001', 'Money table', 'round', 20,
'MiniMonopoly');
INSERT INTO board VALUES('B1002', 'Horse platform', 'round', 50, 'Horse
INSERT INTO board VALUES('B1003', 'Hug Land', 'round', 15, 'Hug Your
INSERT INTO board VALUES('B1004', 'The River', 'rectangle', 40, 'The
Duckling Rush');
INSERT INTO board VALUES('B1005', 'Seoul', 'circle', 32, 'Korean
Bonnies');
INSERT INTO board VALUES('B1006', 'MegaMoney table', 'round', 50,
'MegaMonopoly');
INSERT INTO board VALUES('B1007', 'Zoo Table', 'round', 11, 'Squirrel
Catch');
INSERT INTO board VALUES('B1008', 'Dark Hug Land', 'round', 17, 'Hug
Your Enemy');
INSERT INTO board VALUES('B1009', 'Bed', 'rectangle', 43, 'Sleep More');
INSERT INTO board VALUES('B1010', 'Farm table', 'circle', 32, 'Hungarian
Pigs');
```

make their pig dirtier or draw a card.', 'Philip Hoolank', 'After ten

```
INSERT INTO event VALUES('E1001', 'Red storm', 'Every enemy figure
position change to a random number');
INSERT INTO event VALUES('E1002', 'Drink and play', 'All your money has
gone away.');
INSERT INTO event VALUES('E1003', 'Doping', 'Your horse get extra speed
for two rounds. You can step twice as you would.');
INSERT INTO event VALUES('E1004', 'Eat', 'Your horse is tired, and
stopped to eat. You can't move for one round.');
INSERT INTO event VALUES('E1005', 'Extra hug', 'You can get an extra hug
from a chosen player.');
INSERT INTO event VALUES('E1006', 'Draw', 'Draw a card!');
INSERT INTO event VALUES('E1007', 'Fly wing', 'The teams duck wings has
upgraded one level.');
INSERT INTO event VALUES('E1008', 'Pass', 'You miss one round.');
INSERT INTO event VALUES('E1009', 'Restart', 'Every team go back to
starting position.');
INSERT INTO event VALUES('E1010', 'Comb your bunny', 'You can use a comb
on your bunny, and it will give him / her plus 1 fluffy points.');
INSERT INTO event VALUES('E1011', 'Money storm', 'Every team gets random'
amount of money.');
INSERT INTO event VALUES('E1012', 'Sadness', 'Every team has to act
sad.');
INSERT INTO event VALUES('E1013', 'SelfDoping', 'Your squirrel became
more powerful. Pretty useless.');
INSERT INTO event VALUES('E1014', 'EatAcorn', 'Your squirrel is tired,
and stopped to eat. You can't move for one round.');
INSERT INTO event VALUES('E1015', 'Extra sadhug', 'You can get an extra
hug from the player you hate the most.');
INSERT INTO event VALUES('E1016', 'Draw', 'Draw another card!');
INSERT INTO event VALUES('E1017', 'Sweet Home', 'Gets extra sleep
time.');
INSERT INTO event VALUES('E1018', 'Pills', 'Your team gets sleep
INSERT INTO event VALUES('E1019', 'Extra dirt', 'Your pig gets some
extra dirt.');
INSERT INTO event VALUES('E1020', 'Clean', 'Your pig gets clean. Sad.');
INSERT INTO figure VALUES('F1001', 'The Scary Blood Horse', 'red',
'horse', 'B1001');
INSERT INTO figure VALUES('F1002', 'The Beautiful Orange Hyppo',
'orange', 'hyppo', 'B1001');
INSERT INTO figure VALUES('F1003', 'The Tree Dog', 'brown', 'dog',
'B1002');
INSERT INTO figure VALUES('F1004', 'The Lemon Car', 'yellow', 'car',
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'B1002');
INSERT INTO figure VALUES('F1005', 'The Money Eifell-tower', 'green',
'Eifell-tower', 'B1003');
INSERT INTO figure VALUES('F1006', 'The Sad Bus', 'grey', 'bus',
'B1003');
INSERT INTO figure VALUES('F1007', 'The Clear Pyramid', 'white',
'pyramid', 'B1004');
INSERT INTO figure VALUES('F1008', 'The Oceanhog', 'blue', 'hedgehog',
'B1004');
INSERT INTO figure VALUES('F1009', 'The Blueberry Plane', 'purple',
'plane', 'B1005');
INSERT INTO figure VALUES('F1010', 'The Kind Pig', 'rose', 'pig',
INSERT INTO figure VALUES('F1011', 'The Lovely Hug Horse', 'pink',
'horse', 'B1006');
INSERT INTO figure VALUES('F1012', 'The Super Apple Hyppo', 'red',
'hyppo', 'B1006');
INSERT INTO figure VALUES('F1013', 'The Clean Dog', 'white', 'dog',
'B1007');
INSERT INTO figure VALUES('F1014', 'The Tasty Bed', 'yellow', 'bed',
'B1007');
INSERT INTO figure VALUES('F1015', 'The Poor Gate', 'green', 'gate',
'B1008');
INSERT INTO figure VALUES('F1016', 'The Happy Deer', 'yellow', 'deer',
'B1008');
INSERT INTO figure VALUES('F1017', 'The Free Rose', 'rosered', 'rose',
'B1009');
INSERT INTO figure VALUES('F1018', 'The Oceanpig', 'blue', 'pig',
'B1009');
INSERT INTO figure VALUES('F1019', 'The Strawberry Plane', 'red',
'plane', 'B1010');
INSERT INTO figure VALUES('F1020', 'The Super Kind Piglet', 'rose',
'piglet', 'B1010');
INSERT INTO card VALUES('C1001', 'Red storm', 'red', 1, 'A big red
storm', 'B1001');
INSERT INTO card VALUES('C1002', 'Las vegas', 'red', 2, 'A picture of
crying mans in Las Vegas', 'B1001');
INSERT INTO card VALUES('C1003', 'Steroid', 'green', 3, 'A horse with
big muscles', 'B1002');
INSERT INTO card VALUES('C1004', 'Blue hey', 'blue', 4, 'A picture of
fat horses', 'B1002');
INSERT INTO card VALUES('C1005', 'Extra hug', 'yellow', 5, 'Happy mans
hugging each other', 'B1003');
INSERT INTO card VALUES('C1006', 'Draw', 'blue', 6, 'A simple picture of
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a card', 'B1003');
INSERT INTO card VALUES('C1007', 'Ultimate wing', 'yellow', 7, 'A
dragon', 'B1004');
INSERT INTO card VALUES('C1008', 'Pass', 'grey', 8, 'A sad emoji',
'B1004');
INSERT INTO card VALUES('C1009', 'Restart', 'blue', 9, 'A resart icon,
and sad faces', 'B1005');
INSERT INTO card VALUES('C1010', 'Comb', 'blue', 10, 'A comb and a happy
bunny', 'B1005');
INSERT INTO card VALUES('C1011', 'Blue moneystorm', 'blue', 11, 'Blue
money and lightning', 'B1006');
INSERT INTO card VALUES('C1012', 'Silvermoon city', 'grey', 12, 'A
picture of crying mans in Silvermoon', 'B1006');
INSERT INTO card VALUES('C1013', 'Steroid', 'green', 13, 'A squirrel
with big muscles', 'B1007');
INSERT INTO card VALUES('C1014', 'Brown Acorn', 'brown', 14, 'A picture
of acorns', 'B1007');
INSERT INTO card VALUES('C1015', 'Extra enemyhug', 'black', 15, 'Sad
mans hugging each other', 'B1008');
INSERT INTO card VALUES('C1016', 'Draw', 'black', 16, 'A simple picture
of a card and sad faces', 'B1008');
INSERT INTO card VALUES('C1017', 'Ultimate Bedroom', 'grey', 17, 'A
luxury bed', 'B1009');
INSERT INTO card VALUES('C1018', 'Sleep pills', 'grey', 18, 'Medicine',
INSERT INTO card VALUES('C1019', 'Extra dirt', 'blue', 19, 'A picture of
a toalett', 'B1010');
INSERT INTO card VALUES('C1020', 'Cleaning time', 'blue', 20, 'A sad
clean pig', 'B1010');
INSERT INTO related_to VALUES('C1001', 'E1001');
INSERT INTO related_to VALUES('C1002', 'E1002');
INSERT INTO related_to VALUES('C1003', 'E1003');
INSERT INTO related to VALUES('C1004', 'E1004');
INSERT INTO related to VALUES('C1005', 'E1005');
INSERT INTO related_to VALUES('C1006', 'E1006');
INSERT INTO related_to VALUES('C1007', 'E1007');
INSERT INTO related to VALUES('C1008', 'E1008');
INSERT INTO related_to VALUES('C1009', 'E1009');
INSERT INTO related_to VALUES('C1010', 'E1010');
INSERT INTO related_to VALUES('C1011', 'E1011');
INSERT INTO related_to VALUES('C1012', 'E1012');
INSERT INTO related_to VALUES('C1013', 'E1013');
INSERT INTO related_to VALUES('C1014', 'E1014');
```

```
INSERT INTO related_to VALUES('C1015', 'E1015');
INSERT INTO related_to VALUES('C1016', 'E1016');
INSERT INTO related_to VALUES('C1017', 'E1017');
INSERT INTO related_to VALUES('C1018', 'E1018');
INSERT INTO related_to VALUES('C1019', 'E1019');
INSERT INTO related_to VALUES('C1020', 'E1020');
INSERT INTO leader VALUES('P1027', 'Steve Hedgehog', 'male', 8);
INSERT INTO leader VALUES('P1028', 'Steve Jobs', 'male', 10);
INSERT INTO leader VALUES('P1029', 'Bill Gates', 'male', 11);
INSERT INTO leader VALUES('P1030', 'Jeff Bezos', 'male', 12);
INSERT INTO leader VALUES('P1031', 'Harley Quinn', 'female', 9);
INSERT INTO leader VALUES('P1032', 'Joanne Wayne', 'female', 7);
INSERT INTO leader VALUES('P1033', 'Kate Allen', 'female', 13);
INSERT INTO leader VALUES('P1034', 'Peter Parker', 'male', 11);
INSERT INTO leader VALUES('P1035', 'Dorothy Lance', 'female', 12);
INSERT INTO leader VALUES('P1036', 'Sara Minecraft', 'female', 10);
INSERT INTO leader VALUES('P1037', 'Brad Hedgehog', 'male', 8);
INSERT INTO leader VALUES('P1038', 'Brad Pitt', 'male', 10);
INSERT INTO leader VALUES('P1039', 'Mark Hamil', 'male', 11);
INSERT INTO leader VALUES('P1040', 'Steve McDonald', 'male', 12);
INSERT INTO leader VALUES('P1041', 'Holy Law', 'female', 9);
INSERT INTO leader VALUES('P1042', 'Marques Wayne', 'female', 8);
INSERT INTO leader VALUES('P1043', 'Kate Wisdom', 'female', 14);
INSERT INTO leader VALUES('P1044', 'Mark Zuck', 'male', 10);
INSERT INTO leader VALUES('P1045', 'Laurel Quentin', 'female', 11);
INSERT INTO leader VALUES('P1046', 'Megatrony Adams', 'female', 10);
INSERT INTO team VALUES('The Conscious Donkeys', 4, 'P1036',
'MiniMonopoly', 'F1001');
INSERT INTO team VALUES('The Succinct Buffalos', 3, 'P1028',
'MiniMonopoly', 'F1002');
INSERT INTO team VALUES('The Grumpy Elephants', 1, 'P1029', 'Horse
Race', 'F1003');
INSERT INTO team VALUES('The Waggish Squirrels', 2, 'P1030', 'Horse
Race', 'F1004');
INSERT INTO team VALUES('The Little Shrews', 6, 'P1031', 'Hug Your
Friend', 'F1005');
INSERT INTO team VALUES('The Telling Gazelles', 4, 'P1032', 'Hug Your
Friend', 'F1006');
INSERT INTO team VALUES('The Fluffy Hedgehoges', 10, 'P1033', 'The
Duckling Rush', 'F1007');
INSERT INTO team VALUES ('The Kind Panthers', 10, 'P1034', 'The Duckling
Rush', 'F1008');
```

```
INSERT INTO team VALUES('The Blind Dinos', 9, 'P1027', 'Korean Bonnies',
'F1009');
INSERT INTO team VALUES('The Spotted Whales', 9, 'P1035', 'Korean
Bonnies', 'F1010');
INSERT INTO team VALUES('The Crazy Monkeys', 7, 'P1037', 'MegaMonopoly',
'F1011');
INSERT INTO team VALUES('The Sleepy Beavers', 3, 'P1038',
'MegaMonopoly', 'F1012');
INSERT INTO team VALUES('The Strong Camels', 1, 'P1039', 'Squirrel
Catch', 'F1013');
INSERT INTO team VALUES('The Sweet Lames', 2, 'P1040', 'Squirrel Catch',
'F1014');
INSERT INTO team VALUES('The Clear Dachshunds', 6, 'P1041', 'Hug Your
Enemy', 'F1015');
INSERT INTO team VALUES('The Clever Fish', 4, 'P1042', 'Hug Your Enemy',
'F1016');
INSERT INTO team VALUES('The Smart Tigers', 10, 'P1043', 'Sleep More',
INSERT INTO team VALUES('The Lawful Lions', 10, 'P1044', 'Sleep More',
'F1018');
INSERT INTO team VALUES('The Chubby Elephants', 9, 'P1045', 'Hungarian
Pigs', 'F1019');
INSERT INTO team VALUES('The Neutral Gophers', 9, 'P1046', 'Hungarian
Pigs', 'F1020');
INSERT INTO player VALUES('P1001', 'Robert Puente', 'male', 12, 'The
Conscious Donkeys');
INSERT INTO player VALUES('P1002', 'Benjamin Reardon', 'male', 13, 'The
Conscious Donkeys');
INSERT INTO player VALUES('P1003', 'Kevin Amaya', 'male', 6, 'The
Succinct Buffalos');
INSERT INTO player VALUES('P1004', 'Marcus Bates', 'male', 12, 'The
Succinct Buffalos');
INSERT INTO player VALUES('P1005', 'Benjamin Belt', 'male', 10, 'The
Succinct Buffalos');
INSERT INTO player VALUES('P1006', 'Devon Davis', 'male', 9, 'The Grumpy
Elephants');
INSERT INTO player VALUES('P1007', 'Kelvin Tapia', 'male', 12, 'The
Grumpy Elephants');
INSERT INTO player VALUES('P1008', 'Vanesa Beckwith ', 'female', 6,
'The Grumpy Elephants');
INSERT INTO player VALUES('P1009', 'Ann Salgado', 'female', 8, 'The
Waggish Squirrels');
```

```
INSERT INTO player VALUES('P1010', 'Rosalyn Haynes', 'female', 7, 'The
Waggish Squirrels');
INSERT INTO player VALUES('P1011', 'Shaneka Gary', 'female', 7, 'The
Little Shrews');
INSERT INTO player VALUES('P1012', 'Ann Wehr', 'female', 10, 'The Little
Shrews');
INSERT INTO player VALUES('P1013', 'Cynthia Skinner', 'female', 11, 'The
Telling Gazelles');
INSERT INTO player VALUES('P1014', 'Dorothy Byers', 'female', 11, 'The
Telling Gazelles');
INSERT INTO player VALUES('P1015', 'Annie Martinez', 'female', 12,
'The Fluffy Hedgehoges');
INSERT INTO player VALUES('P1016', 'Tracey Beus', 'female', 7, 'The
Fluffy Hedgehoges');
INSERT INTO player VALUES('P1017', 'Kimberly Sisson', 'female', 13, 'The
Fluffy Hedgehoges');
INSERT INTO player VALUES('P1018', 'Rochelle Heidenreich', 'female', 14,
'The Kind Panthers');
INSERT INTO player VALUES('P1019', 'Joyce Frink', 'female', 15, 'The
Kind Panthers');
INSERT INTO player VALUES('P1020', 'Connie Marcial', 'female', 15, 'The
Kind Panthers');
INSERT INTO player VALUES('P1021', 'Lisa Brannon', 'female', 7, 'The
Blind Dinos');
INSERT INTO player VALUES('P1022', 'Margie Sharp', 'female', 17, 'The
Blind Dinos');
INSERT INTO player VALUES('P1023', 'Dolores Thompson', 'female', 8, 'The
Blind Dinos');
INSERT INTO player VALUES('P1024', 'Angela Austin', 'female', 6, 'The
Spotted Whales');
INSERT INTO player VALUES('P1025', 'Linda Butts', 'female', 12, 'The
Spotted Whales');
INSERT INTO player VALUES('P1026', 'Steve Wozniak', 'male', 11, 'The
Spotted Whales');
INSERT INTO player VALUES('P1047', 'Klyde Puente', 'male', 12, 'The
Crazy Monkeys');
INSERT INTO player VALUES('P1048', 'Benjamin Brenton', 'male', 14, 'The
Crazy Monkeys');
INSERT INTO player VALUES('P1049', 'Brendon Amaya', 'male', 7, 'The
Sleepy Beavers');
INSERT INTO player VALUES('P1050', 'Matt Bates', 'male', 10, 'The Sleepy
Beavers');
INSERT INTO player VALUES('P1051', 'Hokage Belt', 'male', 12, 'The
Strong Camels');
INSERT INTO player VALUES('P1052', 'Muraki Daraki', 'male', 7, 'The
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Strong Camels');
INSERT INTO player VALUES('P1053', 'Kim Tapia', 'male', 13, 'The Sweet
Lames');
INSERT INTO player VALUES('P1054', 'Katelyn Beckwitch', 'female', 16,
'The Sweet Lames');
INSERT INTO player VALUES('P1055', 'Anna Salvados', 'female', 8, 'The
Clear Dachshunds');
INSERT INTO player VALUES('P1056', 'Rosalyn Hook', 'female', 7, 'The
Clear Dachshunds');
INSERT INTO player VALUES('P1057', 'Shakira Black', 'female', 7, 'The
Clever Fish');
INSERT INTO player VALUES('P1058', 'Lily Wehra', 'female', 11, 'The
Clever Fish');
INSERT INTO player VALUES('P1059', 'Cindy Ripper', 'female', 12, 'The
Smart Tigers');
INSERT INTO player VALUES('P1060', 'Dora Brian', 'female', 12, 'The
Smart Tigers');
INSERT INTO player VALUES('P1061', 'Kelly Martinzo', 'female', 13, 'The
Lawful Lions');
INSERT INTO player VALUES('P1062', 'Trudy Beussek', 'female', 5, 'The
Lawful Lions');
INSERT INTO player VALUES('P1063', 'Kelly Silson', 'female', 17, 'The
Chubby Elephants');
INSERT INTO player VALUES('P1064', 'Rochelle Hindenburg', 'female', 12,
'The Chubby Elephants');
INSERT INTO player VALUES('P1065', 'Joi Makeup', 'female', 15, 'The
Neutral Gophers');
INSERT INTO player VALUES('P1066', 'Mara Makeup', 'female', 15, 'The
Neutral Gophers');
```

# 5. SQL queries

What are the attributes of the youngest female player?
 Legfiatalabb lány játékos adatai?

```
SELECT *
FROM player
WHERE age = (SELECT MIN(AGE) FROM player WHERE gender = 'female');
```

What is the average age of the leaders older than 10?
 Mennyi azon leaderek átlagéletkora, akik 10 év fölöttiek?

```
SELECT AVG(AGE)
FROM leader
WHERE age > 10;
```

• Which figures are related to the groups with minimum 10 points?

Mely figurák tartoznak a legalább 10 pontszámmal rendelkező csapatokhoz?

```
SELECT team.team_name, figure.gamepcs_name, figure.shape, figure.color
```

```
FROM team INNER JOIN figure ON team.gamepcs_id = figure.gamepcs_id
WHERE team.score > 9;
```

 Which games are those, which are played on rectangle shaped boards and the board has at least 20 fields?

Mely játékok azok, melyeket olyan szögletes táblákon játszunk, amin több mint 20 mező van?

```
SELECT game.game_name
FROM game INNER JOIN board ON game.game_name = board.game_name
WHERE board.shape = 'rectangle' AND board.field_number > 20;
```

Which game is played on the Hug Land table and who is the author of its ruleset?
 Melyik az a társasjáték és ki a szabályzatának a szerzője, amelyiket a Hug Land táblán játszanak?

```
SELECT game.game_name, ruleset.author
FROM ruleset
INNER JOIN game ON game.rule_id = ruleset.rule_id
INNER JOIN board ON board.game_name = game.game_name
WHERE board.board_name = 'Hug Land';
```

• How many girls are older than 10 years in that team, which has The Super Kind Piglet figure and which one is that team?

Hány 10 évnél idősebb lány játszik abban a csapatban, amelyiknek a The Super Kind Piglet a bábúja, és melyik ez a csapat?

```
SELECT COUNT(player.name), team.team_name
FROM player
INNER JOIN team ON player.team_name = team.team_name
INNER JOIN figure ON team.gamepcs_id = figure.gamepcs_id
WHERE figure.gamepcs_name = 'The Super Kind Piglet' AND player.age > 10
AND player.gender = 'female'
GROUP BY team.team name;
```

• What is the name and the description of the event which is related to the yellow cards in the table related to The Duckling Rush?

Mi a The Duckling Rush játékhoz tartozó táblán a sárga kártyákhoz tartozó esemény neve és leírása?

```
SELECT event.event_name, event.description
FROM related_to
INNER JOIN event ON event.event_id = related_to.event_id
INNER JOIN card ON card.gamepcs_id = related_to.gamepcs_id
INNER JOIN board ON board.board_id = card.board_id
INNER JOIN game ON game.game_name = board.game_name
WHERE game.game_name = 'The Duckling Rush' AND card.color = 'yellow';
```