

# **Neo4j Physical Model**

#### Schema for:

Model name: New model

Author: Version:

File name: neo4j.hck.json

File path: /home/hackolade/Documents/data/neo4j.hck.json

Printed On: Thu Jul 20 2023 15:09:32 GMT+0000 (Coordinated Universal Time)

Created with: Hackolade - Polyglot data modeling for NoSQL databases, storage formats, REST APIs,

and JSON in RDBMS

#### 1. Model

#### 2. Databases

2.1 neo4j

2.1.2. Node Labels

2.1.2.1 Match

2.1.2.2 Person

2.1.2.3 Squad

2.1.2.4 Team

2.1.2.5 Tournament

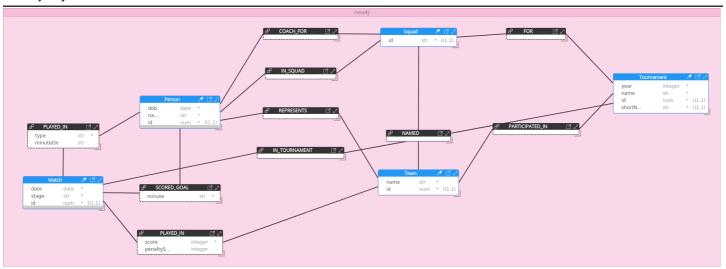
#### 3. Relationship Types

- 3.1 COACH\_FOR
- 3.2 FOR
- 3.3 IN SQUAD
- 3.4 IN\_TOURNAMENT
- 3.5 NAMED
- 3.6 PARTICIPATED\_IN
- 3.7 PLAYED IN
- 3.8 PLAYED IN
- 3.9 REPRESENTS
- 3.10 SCORED GOAL

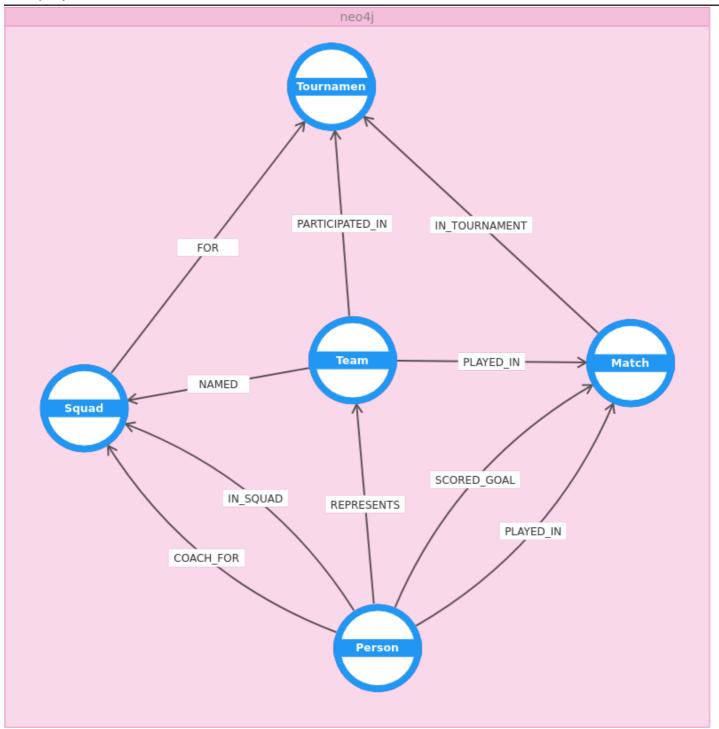
#### 1. MODEL

#### 1.1 Model New model

#### 1.1.1 New model Entity Relationship Diagram



# 1.1.2 New model Graph Diagram



#### 1.1.3 New model Properties

#### 1.1.3.1 Details tab

| PROPERTY           | VALUE     |
|--------------------|-----------|
| Model name         | New model |
| Technical name     |           |
| Description        |           |
| Author             |           |
| Version            |           |
| Synchronization Id |           |
| DB vendor          | Neo4j     |
| DB version         | 5.x       |
| Lineage capture    |           |
| Polyglot models    |           |
| Comments           |           |

#### 1.1.4 New model Model Definitions

#### 2. DATABASES

## 2.1 Database neo4j



## 2.1.1 neo4j Properties

| PROPERTY       | VALUE |
|----------------|-------|
| Database name  | neo4j |
| Technical name |       |
| Activated      | true  |
| Description    |       |
| Comments       |       |

## 2.1.2 neo4j Node Labels

#### 2.1.2.1 Node Labels Match

## 2.1.2.1.1 Match Properties

| PROPERTY              | VALUE |
|-----------------------|-------|
| Node key              | Match |
| Technical name        |       |
| Activated             | true  |
| Id                    |       |
| \$ref                 |       |
| Description           |       |
| Database              | neo4j |
| Parent node label     |       |
| Sub-Node              |       |
| Additional properties | true  |
| Comments              |       |

## 2.1.2.1.2 Match Property keys

| PROPERTY KEY | TYPE   | REQ  | KEY | DESCRIPTION | COMMENTS |
|--------------|--------|------|-----|-------------|----------|
| date         | date   | true |     |             |          |
| stage        | string | true |     |             |          |
| id           | number | true |     |             |          |

## 2.1.2.1.2.1 Property Key date

#### 2.1.2.1.2.1.1 date Tree Diagram



## **2.1.2.1.2.1.2** date properties

| PROPERTY            | VALUE      |
|---------------------|------------|
| Name                | date       |
| Technical name      |            |
| Activated           | true       |
| Id                  |            |
| Description         |            |
| Туре                | temporal   |
| Subtype             | date       |
| Dependencies        |            |
| Required constraint | true       |
| Unique constraint   | false      |
| Default             |            |
| Faker function      |            |
| Sample              | 1999-06-20 |
| Comments            |            |

## 2.1.2.1.2.2 Property Key stage

## 2.1.2.1.2.2.1 stage Tree Diagram



## **2.1.2.1.2.2.2 stage properties**

| PROPERTY            | VALUE         |
|---------------------|---------------|
| Name                | stage         |
| Technical name      |               |
| Activated           | true          |
| Id                  |               |
| Description         |               |
| Туре                | string        |
| Min length          |               |
| Max length          |               |
| Pattern             |               |
| Format              |               |
| Default             |               |
| Enum                |               |
| Dependencies        |               |
| Required constraint | true          |
| Unique constraint   | false         |
| Faker function      |               |
| Sample              | Group Matches |
| Comments            |               |

# 2.1.2.1.2.3 Property Key id

## 2.1.2.1.2.3.1 id Tree Diagram



#### 2.1.2.1.2.3.2 id properties

| PROPERTY            | VALUE     |
|---------------------|-----------|
| Name                | id        |
| Technical name      |           |
| Activated           | true      |
| Id                  |           |
| Description         |           |
| Туре                | number    |
| Subtype             |           |
| Unit                |           |
| Min value           |           |
| Excl min            | false     |
| Max value           |           |
| Excl max            | false     |
| Multiple of         |           |
| Divisible by        |           |
| Default             |           |
| Enum                |           |
| Dependencies        |           |
| Required constraint | true      |
| Unique constraint   | true      |
| Faker function      |           |
| Sample              | 300438261 |
| Comments            |           |

## 2.1.2.1.3 Match Indexes

| PROPERTY    | CONSTRAINT_A016A763 |
|-------------|---------------------|
| Name        | constraint_a016a763 |
| Activated   | true                |
| Key         | id                  |
| State       | ONLINE              |
| Provider    | range-1.0           |
| Description |                     |
| Comments    |                     |

## 2.1.2.1.4 Match JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "Match",
  "properties": {
     "date": {
       "type": "string"
    },
     "stage": {
       "type": "string"
     "id": {
       "type": "number"
  },
  "required": [
     "date",
     "stage",
     "id"
}
```

## 2.1.2.1.5 Match JSON data

```
{
    "date": "1999-06-20",
    "stage": "Group Matches",
    "id": 300438261
}
```

#### 2.1.2.2 Node Labels Person

#### 2.1.2.2.1 Person Properties

| PROPERTY              | VALUE  |
|-----------------------|--------|
| Node key              | Person |
| Technical name        |        |
| Activated             | true   |
| Id                    |        |
| \$ref                 |        |
| Description           |        |
| Database              | neo4j  |
| Parent node label     |        |
| Sub-Node              |        |
| Additional properties | true   |
| Comments              |        |

## 2.1.2.2.2 Person Property keys

| PROPERTY KEY | TYPE   | REQ  | KEY | DESCRIPTION | COMMENTS |
|--------------|--------|------|-----|-------------|----------|
| dob          | date   | true |     |             |          |
| name         | string | true |     |             |          |
| id           | number | true |     |             |          |

## 2.1.2.2.1 Property Key dob

## 2.1.2.2.1.1 dob Tree Diagram



## 2.1.2.2.1.2 dob properties

| PROPERTY            | VALUE      |
|---------------------|------------|
| Name                | dob        |
| Technical name      |            |
| Activated           | true       |
| Id                  |            |
| Description         |            |
| Туре                | temporal   |
| Subtype             | date       |
| Dependencies        |            |
| Required constraint | true       |
| Unique constraint   | false      |
| Default             |            |
| Faker function      |            |
| Sample              | 1979-05-12 |
| Comments            |            |

## 2.1.2.2.2 Property Key name

## 2.1.2.2.2.1 name Tree Diagram



## **2.1.2.2.2.2 name properties**

| PROPERTY            | VALUE          |
|---------------------|----------------|
| Name                | name           |
| Technical name      |                |
| Activated           | true           |
| Id                  |                |
| Description         |                |
| Туре                | string         |
| Min length          |                |
| Max length          |                |
| Pattern             |                |
| Format              |                |
| Default             |                |
| Enum                |                |
| Dependencies        |                |
| Required constraint | true           |
| Unique constraint   | false          |
| Faker function      |                |
| Sample              | Dianne Alagich |
| Comments            |                |

## 2.1.2.2.3 Property Key id

## 2.1.2.2.3.1 id Tree Diagram



## 2.1.2.2.3.2 id properties

| PROPERTY            | VALUE  |
|---------------------|--------|
| Name                | id     |
| Technical name      |        |
| Activated           | true   |
| Id                  |        |
| Description         |        |
| Туре                | number |
| Subtype             |        |
| Unit                |        |
| Min value           |        |
| Excl min            | false  |
| Max value           |        |
| Excl max            | false  |
| Multiple of         |        |
| Divisible by        |        |
| Default             |        |
| Enum                |        |
| Dependencies        |        |
| Required constraint | true   |
| Unique constraint   | true   |
| Faker function      |        |
| Sample              | 277233 |
| Comments            |        |

#### 2.1.2.2.3 Person Indexes

| PROPERTY    | CONSTRAINT_50656458 |
|-------------|---------------------|
| Name        | constraint_50656458 |
| Activated   | true                |
| Key         | id                  |
| State       | ONLINE              |
| Provider    | range-1.0           |
| Description |                     |
| Comments    |                     |

## 2.1.2.2.4 Person JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "Person",
  "properties": {
     "dob": {
       "type": "string"
    },
     "name": {
       "type": "string"
     "id": {
       "type": "number"
  },
  "required": [
     "dob",
     "name",
     "id"
}
```

## 2.1.2.2.5 Person JSON data

```
{
    "dob": "1979-05-12",
    "name": "Dianne Alagich",
    "id": 277233
}
```

## 2.1.2.3 Node Labels Squad

#### 2.1.2.3.1 Squad Properties

| PROPERTY              | VALUE |
|-----------------------|-------|
| Node key              | Squad |
| Technical name        |       |
| Activated             | true  |
| Id                    |       |
| \$ref                 |       |
| Description           |       |
| Database              | neo4j |
| Parent node label     |       |
| Sub-Node              |       |
| Additional properties | true  |
| Comments              |       |

## 2.1.2.3.2 Squad Property keys

| PROPERTY KEY | TYPE   | REQ  | KEY | DESCRIPTION | COMMENTS |
|--------------|--------|------|-----|-------------|----------|
| id           | string | true |     |             |          |

## 2.1.2.3.2.1 Property Key id

## 2.1.2.3.2.1.1 id Tree Diagram



## 2.1.2.3.2.1.2 id properties

| PROPERTY            | VALUE           |
|---------------------|-----------------|
| Name                | id              |
| Technical name      |                 |
| Activated           | true            |
| Id                  |                 |
| Description         |                 |
| Туре                | string          |
| Min length          |                 |
| Max length          |                 |
| Pattern             |                 |
| Format              |                 |
| Default             |                 |
| Enum                |                 |
| Dependencies        |                 |
| Required constraint | true            |
| Unique constraint   | true            |
| Faker function      |                 |
| Sample              | England in 2007 |
| Comments            |                 |

## 2.1.2.3.3 Squad Indexes

| PROPERTY    | CONSTRAINT_44E8CDA2 |
|-------------|---------------------|
| Name        | constraint_44e8cda2 |
| Activated   | true                |
| Key         | id                  |
| State       | ONLINE              |
| Provider    | range-1.0           |
| Description |                     |
| Comments    |                     |

# 2.1.2.3.4 Squad JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "Squad",
  "properties": {
      "id": {
      "type": "string"
      }
  },
  "required": [
      "id"
  ]
}
```

#### 2.1.2.3.5 Squad JSON data

```
{
    "id": "England in 2007"
}
```

#### 2.1.2.4 Node Labels Team

#### 2.1.2.4.1 Team Properties

| PROPERTY              | VALUE |
|-----------------------|-------|
| Node key              | Team  |
| Technical name        |       |
| Activated             | true  |
| Id                    |       |
| \$ref                 |       |
| Description           |       |
| Database              | neo4j |
| Parent node label     |       |
| Sub-Node              |       |
| Additional properties | true  |
| Comments              |       |

## 2.1.2.4.2 Team Property keys

| PROPERTY KEY | TYPE   | REQ  | KEY | DESCRIPTION | COMMENTS |
|--------------|--------|------|-----|-------------|----------|
| name         | string | true |     |             |          |
| id           | number | true |     |             |          |

#### 2.1.2.4.2.1 Property Key name

## **2.1.2.4.2.1.1** name Tree Diagram



#### **2.1.2.4.2.1.2** name properties

| PROPERTY            | VALUE  |
|---------------------|--------|
| Name                | name   |
| Technical name      |        |
| Activated           | true   |
| Id                  |        |
| Description         |        |
| Туре                | string |
| Min length          |        |
| Max length          |        |
| Pattern             |        |
| Format              |        |
| Default             |        |
| Enum                |        |
| Dependencies        |        |
| Required constraint | true   |
| Unique constraint   | false  |
| Faker function      |        |
| Sample              | Japan  |
| Comments            |        |

# 2.1.2.4.2.2 Property Key id

## 2.1.2.4.2.2.1 id Tree Diagram



#### 2.1.2.4.2.2.2 id properties

| PROPERTY            | VALUE   |
|---------------------|---------|
| Name                | id      |
| Technical name      |         |
| Activated           | true    |
| Id                  |         |
| Description         |         |
| Туре                | number  |
| Subtype             |         |
| Unit                |         |
| Min value           |         |
| Excl min            | false   |
| Max value           |         |
| Excl max            | false   |
| Multiple of         |         |
| Divisible by        |         |
| Default             |         |
| Enum                |         |
| Dependencies        |         |
| Required constraint | true    |
| Unique constraint   | true    |
| Faker function      |         |
| Sample              | 1888631 |
| Comments            |         |

## 2.1.2.4.3 **Team Indexes**

| PROPERTY    | CONSTRAINT_5101B27D |
|-------------|---------------------|
| Name        | constraint_5101b27d |
| Activated   | true                |
| Key         | id                  |
| State       | ONLINE              |
| Provider    | range-1.0           |
| Description |                     |
| Comments    |                     |

## 2.1.2.4.4 Team JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "Team",
  "properties": {
     "name": {
       "type": "string"
    },
     "id": {
       "type": "number"
  },
  "required": [
     "name",
     "id"
  ]
}
```

## 2.1.2.4.5 Team JSON data

```
{
    "name": "Japan",
    "id": 1888631
}
```

#### 2.1.2.5 Node Labels Tournament

#### 2.1.2.5.1 Tournament Properties

| VALUE      |
|------------|
| Tournament |
|            |
| true       |
|            |
|            |
|            |
| neo4j      |
|            |
|            |
| true       |
|            |
|            |

## 2.1.2.5.2 Tournament Property keys

| PROPERTY KEY | TYPE    | REQ  | KEY | DESCRIPTION | COMMENTS |
|--------------|---------|------|-----|-------------|----------|
| year         | integer | true |     |             |          |
| name         | string  | true |     |             |          |
| id           | number  | true |     |             |          |
| shortName    | string  | true |     |             |          |

## 2.1.2.5.2.1 Property Key year

## 2.1.2.5.2.1.1 year Tree Diagram



## 2.1.2.5.2.1.2 year properties

| PROPERTY            | VALUE   |
|---------------------|---------|
| Name                | year    |
| Technical name      |         |
| Activated           | true    |
| Id                  |         |
| Description         |         |
| Туре                | number  |
| Subtype             | integer |
| Unit                |         |
| Min value           |         |
| Excl min            | false   |
| Max value           |         |
| Excl max            | false   |
| Multiple of         |         |
| Divisible by        |         |
| Default             |         |
| Enum                |         |
| Dependencies        |         |
| Required constraint | true    |
| Unique constraint   | false   |
| Faker function      |         |
| Sample              | 2011    |
| Comments            |         |

## 2.1.2.5.2.2 Property Key name

## 2.1.2.5.2.2.1 name Tree Diagram



#### **2.1.2.5.2.2.2 name properties**

| PROPERTY            | VALUE        |
|---------------------|--------------|
| Name                | name         |
| Technical name      |              |
| Activated           | true         |
| Id                  |              |
| Description         |              |
| Type                | string       |
| Min length          |              |
| Max length          |              |
| Pattern             |              |
| Format              |              |
| Default             |              |
| Enum                |              |
| Dependencies        |              |
| Required constraint | true         |
| Unique constraint   | false        |
| Faker function      |              |
| Sample              | Germany 2011 |
| Comments            |              |

# 2.1.2.5.2.3 Property Key id

## 2.1.2.5.2.3.1 id Tree Diagram



#### 2.1.2.5.2.3.2 id properties

| PROPERTY            | VALUE  |
|---------------------|--------|
| Name                | id     |
| Technical name      |        |
| Activated           | true   |
| Id                  |        |
| Description         |        |
| Туре                | number |
| Subtype             |        |
| Unit                |        |
| Min value           |        |
| Excl min            | false  |
| Max value           |        |
| Excl max            | false  |
| Multiple of         |        |
| Divisible by        |        |
| Default             |        |
| Enum                |        |
| Dependencies        |        |
| Required constraint | true   |
| Unique constraint   | true   |
| Faker function      |        |
| Sample              | 251475 |
| Comments            |        |

## 2.1.2.5.2.4 Property Key shortName

## 2.1.2.5.2.4.1 shortName Tree Diagram

| {ABC}  | shortName |
|--------|-----------|
| (I2.1) | string    |

## 2.1.2.5.2.4.2 shortName properties

| PROPERTY            | VALUE       |
|---------------------|-------------|
| Name                | shortName   |
| Technical name      |             |
| Activated           | true        |
| Id                  |             |
| Description         |             |
| Type                | string      |
| Min length          |             |
| Max length          |             |
| Pattern             |             |
| Format              |             |
| Default             |             |
| Enum                |             |
| Dependencies        |             |
| Required constraint | true        |
| Unique constraint   | false       |
| Faker function      |             |
| Sample              | germany2011 |
| Comments            |             |

#### 2.1.2.5.3 Tournament Indexes

| PROPERTY    | CONSTRAINT_5077B8D | INDEX_36FCEFDF |
|-------------|--------------------|----------------|
| Name        | constraint_5077b8d | index_36fcefdf |
| Activated   | true               | true           |
| Key         | id                 | shortName      |
| State       | ONLINE             | ONLINE         |
| Provider    | range-1.0          | range-1.0      |
| Description |                    |                |
| Comments    |                    |                |

## 2.1.2.5.4 Tournament JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "Tournament",
  "properties": {
     "year": {
       "type": "number"
    },
     "name": {
       "type": "string"
     "id": {
       "type": "number"
     },
     "shortName": {
       "type": "string"
     }
  },
  "required": [
     "year",
     "name",
     "id",
     "shortName"
  ]
}
```

#### 2.1.2.5.5 Tournament JSON data

```
{
    "year": 2011,
    "name": "Germany 2011",
    "id": 251475,
    "shortName": "germany2011"
}
```

## 2.1.3 neo4j Cypher

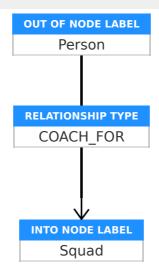
```
:begin
// cat <path to cypher file> | ./bin/cypher-shell -a <address> -u <user> -p <password>
CREATE (`match`:`Match` {
    `date`: date("1999-06-20"),
     `stage`: "Group Matches",
    `id`: 300438261
}),
(`squad`:`Squad` {
    'id': "England in 2007"
}),
(`team`:`Team` {
    `name`: "Japan",
    `id`: 1888631
}),
(`tournament`:`Tournament` {
     `year`: 2011,
     `name`: "Germany 2011",
    `id`: 251475,
     `shortName`: "germany2011"
}),
(`person`:`Person` {
     `dob`: date("1979-05-12"),
     `name`: "Dianne Alagich",
    `id`: 277233
}),
(`match`)-[:`IN_TOURNAMENT` {}]->(`tournament`),
(`squad`)-[:`FOR` {}]->(`tournament`),
(`team`)-[:`NAMED` {}]->(`squad`),
(`team`)-[:`PARTICIPATED_IN` {}]->(`tournament`),
(`team`)-[:`PLAYED_IN` {
     `score`: 4,
    `penaltyScore`: 1
}]->(`match`),
('person')-[:'SCORED GOAL' {
    `minute`: "40'"
}]->(`match`),
(`person`)-[:`COACH_FOR` {}]->(`squad`),
(`person`)-[:`PLAYED IN` {
     `type`: "Started",
    `minuteOn`: "74'"
}]->(`match`),
(`person`)-[:`REPRESENTS` {}]->(`team`),
(`person`)-[:`IN_SQUAD` {}]->(`squad`)
RETURN `match`,`squad`,`team`,`tournament`,`person`;
:commit
```

```
:begin
CREATE CONSTRAINT IF NOT EXISTS FOR (`match`: Match`) REQUIRE `match`.`date` IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('match': Match') REQUIRE 'match'. 'stage' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('match': 'Match') REQUIRE 'match'. id' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('match': 'Match') REQUIRE 'match'. id' IS UNIQUE;
CREATE CONSTRAINT IF NOT EXISTS FOR ('squad': 'Squad') REQUIRE 'squad'. 'id' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('squad': 'Squad') REQUIRE 'squad'. 'id' IS UNIQUE;
CREATE CONSTRAINT IF NOT EXISTS FOR ('team': 'Team') REQUIRE 'team'. 'name' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('team': 'Team') REQUIRE 'team'. 'id' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('team': 'Team') REQUIRE 'team'. 'id' IS UNIQUE;
CREATE CONSTRAINT IF NOT EXISTS FOR ('tournament': 'Tournament') REQUIRE 'tournament'. 'year' IS NOT
NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('tournament': 'Tournament') REQUIRE 'tournament'. 'name' IS NOT
NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('tournament': 'Tournament') REQUIRE 'tournament'. 'id' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('tournament': 'Tournament') REQUIRE 'tournament'. 'shortName' IS
NOT NULL:
CREATE CONSTRAINT IF NOT EXISTS FOR ('tournament': 'Tournament') REQUIRE 'tournament'.'id' IS UNIQUE;
CREATE CONSTRAINT IF NOT EXISTS FOR ('person': 'Person') REQUIRE 'person'. 'dob' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('person': 'Person') REQUIRE 'person'. 'name' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('person': 'Person') REQUIRE 'person'. 'id' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ('person': 'Person') REQUIRE 'person'. 'id' IS UNIQUE;
CREATE CONSTRAINT IF NOT EXISTS FOR ()-['scored goal': SCORED GOAL']-() REQUIRE 'scored goal'. minute' IS
CREATE CONSTRAINT IF NOT EXISTS FOR ()-['played in': PLAYED IN']-() REQUIRE 'played in'. 'type' IS NOT NULL;
CREATE CONSTRAINT IF NOT EXISTS FOR ()-['played_in': PLAYED_IN']-() REQUIRE 'played_in'.'score' IS NOT NULL;
:commit
:begin
CREATE RANGE INDEX `constraint_a016a763` IF NOT EXISTS FOR (`match`: `Match`) ON (`match`.`id`);
CREATE RANGE INDEX `constraint 44e8cda2` IF NOT EXISTS FOR (`squad`: `Squad`) ON (`squad`.`id`);
CREATE RANGE INDEX `constraint_5101b27d` IF NOT EXISTS FOR (`team`: `Team`) ON (`team`.`id`);
CREATE RANGE INDEX `constraint_5077b8d` IF NOT EXISTS FOR (`tournament`: `Tournament`) ON
(`tournament`.`id`);
CREATE RANGE INDEX 'index 36fcefdf' IF NOT EXISTS FOR ('tournament': 'Tournament') ON
(`tournament`.`shortName`);
CREATE RANGE INDEX `constraint_50656458` IF NOT EXISTS FOR (`person`:`Person`) ON (`person`.`id`);
:commit
```

#### 3. RELATIONSHIP TYPES

#### 3.1 Relationship Type COACH FOR

#### 3.1.1 COACH FOR Diagram



#### 3.1.2 COACH\_FOR Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | COACH_FOR                            |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | 495e06ca-fd67-4eb5-b3fb-a4d9d275dff6 |
| Into node label           | 9dfe18c3-e557-465b-a451-22f9181aadaa |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

#### 3.1.3 COACH\_FOR Tree Diagram

#### 3.1.4 COACH\_FOR Property keys

PROPERTY KEY TYPE REQ KEY DESCRIPTION COMMENTS

#### 3.1.5 COACH\_FOR JSON Schema

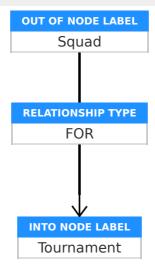
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object"
}
```

## 3.1.6 COACH\_FOR JSON data

{}

## 3.2 Relationship Type FOR

#### 3.2.1 FOR Diagram



#### 3.2.2 FOR Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | FOR                                  |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | 9dfe18c3-e557-465b-a451-22f9181aadaa |
| Into node label           | d9f5cbcc-c608-46ca-b387-356af3921af9 |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

## 3.2.3 FOR Tree Diagram

## 3.2.4 FOR Property keys

PROPERTY KEY TYPE REQ KEY DESCRIPTION COMMENTS

## 3.2.5 FOR JSON Schema

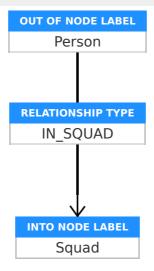
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object"
}
```

## 3.2.6 FOR JSON data

{}

## 3.3 Relationship Type IN\_SQUAD

## 3.3.1 IN\_SQUAD Diagram



#### 3.3.2 IN\_SQUAD Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | IN_SQUAD                             |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | 495e06ca-fd67-4eb5-b3fb-a4d9d275dff6 |
| Into node label           | 9dfe18c3-e557-465b-a451-22f9181aadaa |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

## 3.3.3 IN\_SQUAD Tree Diagram

## 3.3.4 IN\_SQUAD Property keys

PROPERTY KEY TYPE REQ KEY DESCRIPTION COMMENTS

#### 3.3.5 IN\_SQUAD JSON Schema

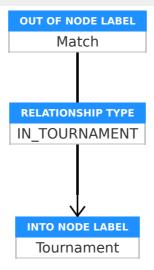
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object"
}
```

#### 3.3.6 IN\_SQUAD JSON data

{}

## 3.4 Relationship Type IN\_TOURNAMENT

## 3.4.1 IN\_TOURNAMENT Diagram



#### **3.4.2 IN\_TOURNAMENT Properties**

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | IN_TOURNAMENT                        |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | c455d243-9531-4f93-ad7f-7c0083332738 |
| Into node label           | d9f5cbcc-c608-46ca-b387-356af3921af9 |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

## 3.4.3 IN\_TOURNAMENT Tree Diagram

## 3.4.4 IN\_TOURNAMENT Property keys

PROPERTY KEY TYPE REQ KEY DESCRIPTION COMMENTS

#### 3.4.5 IN\_TOURNAMENT JSON Schema

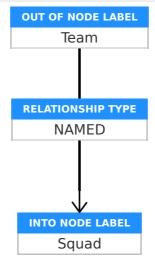
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object"
}
```

## 3.4.6 IN\_TOURNAMENT JSON data

{}

## 3.5 Relationship Type NAMED

#### 3.5.1 NAMED Diagram



#### 3.5.2 NAMED Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | NAMED                                |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | f28dbeec-cbd1-40e0-9570-e19f33606834 |
| Into node label           | 9dfe18c3-e557-465b-a451-22f9181aadaa |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

#### 3.5.3 NAMED Tree Diagram

#### 3.5.4 NAMED Property keys

```
PROPERTY KEY TYPE REQ KEY DESCRIPTION COMMENTS
```

#### 3.5.5 NAMED JSON Schema

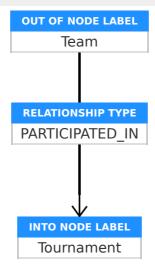
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object"
}
```

## 3.5.6 NAMED JSON data

{}

## 3.6 Relationship Type PARTICIPATED\_IN

## 3.6.1 PARTICIPATED\_IN Diagram



#### 3.6.2 PARTICIPATED\_IN Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | PARTICIPATED_IN                      |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | f28dbeec-cbd1-40e0-9570-e19f33606834 |
| Into node label           | d9f5cbcc-c608-46ca-b387-356af3921af9 |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

#### 3.6.3 PARTICIPATED\_IN Tree Diagram

## 3.6.4 PARTICIPATED\_IN Property keys

PROPERTY KEY TYPE REQ KEY DESCRIPTION COMMENTS

#### 3.6.5 PARTICIPATED\_IN JSON Schema

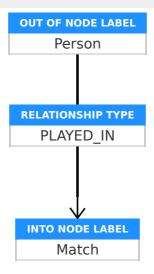
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object"
}
```

#### 3.6.6 PARTICIPATED\_IN JSON data

{}

#### 3.7 Relationship Type PLAYED\_IN

## 3.7.1 PLAYED\_IN Diagram



## 3.7.2 PLAYED\_IN Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | PLAYED_IN                            |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | 495e06ca-fd67-4eb5-b3fb-a4d9d275dff6 |
| Into node label           | c455d243-9531-4f93-ad7f-7c0083332738 |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

# 3.7.3 PLAYED\_IN Tree Diagram

#### 3.7.4 PLAYED\_IN Property keys

| PROPERTY KEY | TYPE   | REQ   | KEY | DESCRIPTION | COMMENTS |
|--------------|--------|-------|-----|-------------|----------|
| type         | string | true  |     |             |          |
| minuteOn     | string | false |     |             |          |

## 3.7.4.1 Property Key type

## 3.7.4.1.1 type Tree Diagram



## 3.7.4.1.2 type properties

| PROPERTY            | VALUE   |
|---------------------|---------|
| Name                | type    |
| Technical name      |         |
| Activated           | true    |
| Id                  |         |
| Description         |         |
| Туре                | string  |
| Min length          |         |
| Max length          |         |
| Pattern             |         |
| Format              |         |
| Default             |         |
| Enum                |         |
| Dependencies        |         |
| Required constraint | true    |
| Faker function      |         |
| Sample              | Started |
| Comments            |         |

## 3.7.4.2 Property Key minuteOn

## 3.7.4.2.1 minuteOn Tree Diagram



#### 3.7.4.2.2 minuteOn properties

| PROPERTY            | VALUE    |
|---------------------|----------|
| Name                | minuteOn |
| Technical name      |          |
| Activated           | true     |
| Id                  |          |
| Description         |          |
| Type                | string   |
| Min length          |          |
| Max length          |          |
| Pattern             |          |
| Format              |          |
| Default             |          |
| Enum                |          |
| Dependencies        |          |
| Required constraint | false    |
| Faker function      |          |
| Sample              | 74'      |
| Comments            |          |

## 3.7.5 PLAYED\_IN JSON Schema

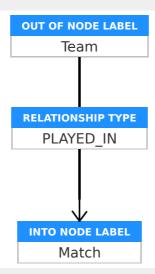
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "properties": {
        "type": "{
            "type": "string"
        },
        "minuteOn": {
            "type": "string"
        }
    },
    "required": [
        "type"
    ]
}
```

## 3.7.6 PLAYED\_IN JSON data

```
{
  "type": "Started",
  "minuteOn": "74'"
}
```

## 3.8 Relationship Type PLAYED\_IN

#### 3.8.1 PLAYED\_IN Diagram



## 3.8.2 PLAYED\_IN Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | PLAYED_IN                            |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | f28dbeec-cbd1-40e0-9570-e19f33606834 |
| Into node label           | c455d243-9531-4f93-ad7f-7c0083332738 |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

## 3.8.3 PLAYED\_IN Tree Diagram

#### 3.8.4 PLAYED\_IN Property keys

| PROPERTY KEY | TYPE    | REQ   | KEY | DESCRIPTION | COMMENTS |
|--------------|---------|-------|-----|-------------|----------|
| score        | integer | true  |     |             |          |
| penaltyScore | integer | false |     |             |          |

## 3.8.4.1 Property Key score

## 3.8.4.1.1 score Tree Diagram



#### 3.8.4.1.2 score properties

| PROPERTY            | VALUE   |
|---------------------|---------|
| Name                | score   |
| Technical name      |         |
| Activated           | true    |
| Id                  |         |
| Description         |         |
| Туре                | number  |
| Subtype             | integer |
| Unit                |         |
| Min value           |         |
| Excl min            | false   |
| Max value           |         |
| Excl max            | false   |
| Multiple of         |         |
| Divisible by        |         |
| Default             |         |
| Enum                |         |
| Dependencies        |         |
| Required constraint | true    |
| Faker function      |         |
| Sample              | 4       |
| Comments            |         |

## 3.8.4.2 Property Key penaltyScore

## 3.8.4.2.1 penaltyScore Tree Diagram



#### 3.8.4.2.2 penaltyScore properties

| PROPERTY            | VALUE        |
|---------------------|--------------|
| Name                | penaltyScore |
| Technical name      |              |
| Activated           | true         |
| Id                  |              |
| Description         |              |
| Туре                | number       |
| Subtype             | integer      |
| Unit                |              |
| Min value           |              |
| Excl min            | false        |
| Max value           |              |
| Excl max            | false        |
| Multiple of         |              |
| Divisible by        |              |
| Default             |              |
| Enum                |              |
| Dependencies        |              |
| Required constraint | false        |
| Faker function      |              |
| Sample              | 1            |
| Comments            |              |

#### 3.8.5 PLAYED\_IN JSON Schema

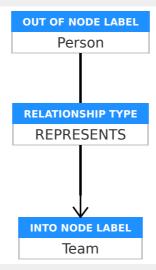
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object",
    "properties": {
        "score": {
            "type": "number"
        },
        "penaltyScore": {
            "type": "number"
        }
    },
    "required": [
        "score"
    ]
}
```

## 3.8.6 PLAYED\_IN JSON data

```
{
    "score": 4,
    "penaltyScore": 1
}
```

#### 3.9 Relationship Type REPRESENTS

#### 3.9.1 REPRESENTS Diagram



#### **3.9.2 REPRESENTS Properties**

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | REPRESENTS                           |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | 495e06ca-fd67-4eb5-b3fb-a4d9d275dff6 |
| Into node label           | f28dbeec-cbd1-40e0-9570-e19f33606834 |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

## 3.9.3 REPRESENTS Tree Diagram

#### 3.9.4 REPRESENTS Property keys

PROPERTY KEY TYPE REQ KEY DESCRIPTION COMMENTS

#### 3.9.5 REPRESENTS JSON Schema

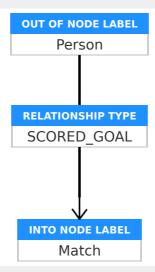
```
{
    "$schema": "http://json-schema.org/draft-04/schema#",
    "type": "object"
}
```

#### 3.9.6 REPRESENTS JSON data

{}

## 3.10 Relationship Type SCORED\_GOAL

#### 3.10.1 SCORED\_GOAL Diagram



## 3.10.2 SCORED\_GOAL Properties

| PROPERTY                  | VALUE                                |
|---------------------------|--------------------------------------|
| Name                      | SCORED_GOAL                          |
| Description               |                                      |
| Activated                 | true                                 |
| Database                  | 0f127ac8-58fc-426a-9ac5-36c1b3336536 |
| Out of node label         | 495e06ca-fd67-4eb5-b3fb-a4d9d275dff6 |
| Into node label           | c455d243-9531-4f93-ad7f-7c0083332738 |
| Comments                  |                                      |
| Implicitly bi-directional |                                      |

## 3.10.3 SCORED\_GOAL Tree Diagram

#### 3.10.4 SCORED\_GOAL Property keys

| PROPERTY KEY | TYPE   | REQ  | KEY | DESCRIPTION | COMMENTS |
|--------------|--------|------|-----|-------------|----------|
| minute       | string | true |     |             |          |

#### 3.10.4.1 Property Key minute

## 3.10.4.1.1 minute Tree Diagram



#### 3.10.4.1.2 minute properties

| PROPERTY            | VALUE  |
|---------------------|--------|
| Name                | minute |
| Technical name      |        |
| Activated           | true   |
| Id                  |        |
| Description         |        |
| Туре                | string |
| Min length          |        |
| Max length          |        |
| Pattern             |        |
| Format              |        |
| Default             |        |
| Enum                |        |
| Dependencies        |        |
| Required constraint | true   |
| Faker function      |        |
| Sample              | 40'    |
| Comments            |        |

#### 3.10.5 SCORED\_GOAL JSON Schema

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "properties": {
      "minute": {
            "type": "string"
        }
    },
    "required": [
      "minute"
    ]
}
```

## 3.10.6 SCORED\_GOAL JSON data

```
{
    "minute": "40'"
}
```