

Department of Computer Science

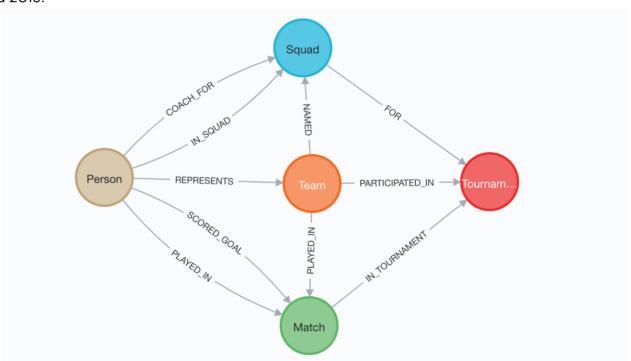
Course: MSc in Informatics/ MSc in Bioinformatics

U.C.: NoSQL Databases

Worksheet 05 - PL06	
Teacher:	António Abelha / Cristiana Neto
Theme:	Introduction to Graph Databases
Class:	Laboratory Practice
Academic Year:	2023-2024 – 2nd Semester
Duration:	2 hours

WWC Database

This database contains all the matches, squads, lineups, and scorers from all the Women World Cups between 1991 and 2019.



- Open Neo4j Desktop;
- Create a new project named "NoSQL";
- Upload the dump file provided to the project Files;
- Then choose the option to Create new DBMS from dump option from the file options.
- Start the database.

You have imported all the matches, squads, lineups, and scorers from all the World Cups between 1991 and 2019. Let's take a look at the schema by running the following query: call db.schema.visualization()

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Present cypher queries that:

- 1. Find the number of teams that have competed in each of the World Cups:
- 2. Find all players and coaches for the Brazil squad in the 2011 tournament, returning the persons names and their role (in squad or coach).
- 3. Retrieves all tournaments along with the teams that participated in each tournament, listing the tournament name and a collection of participating team names.
- 4. Find the player who has participated in the most tournaments.
- 5. Return the teams who played in the first day of the 2023 tournament.
- 6. Find the players who start the games most frequently for the USA team.
- 7. Return the top scorers by country and the respective number of goals.
- 8. Return goal scoring substitutes as well as their team and number of goals.
- 9. Return the number of finals played by team and the respective years, presenting the teams with most finals first.

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