

9/9/25

Part 9: CRUD Operations in Graph Database

Aim: To Perform CRUD operation like creating, inserting, updating, finding, deleting operations on graph spaces.

The steps to get started with Neo4j's Awa Graph Database:

Step 1: Copy and past the following link to your web browser:

<https://neo4j.com/cloud/platform/neo4j-graph-database/?ref=docs-get-started> - dropdown

Step 2: click on "Start Free".

Step 3: choose the option to "Continue with Google".

Step 4: click the "Open" button.

Step 5: After clicking "Open", a text file will be automatically downloaded. This file contains your user ID and Password details.

Step 6: copy the password from downloaded text file and paste it where required.

Step 7: close the "Get Started with Neo4j with beginners guides" if its open.

Step 8: You are now ready to begin practicing with the Graph Database.

Create Node with Properties.

Properties are the key-value pairs using which a node stores data. Create a node with properties using the CREATE clause and need to specify those properties separated by commas within the braces " {}".

Syntax:

```
CREATE (node:{label}:{key1:value, key2:value}) return node
```

Create CricketBoard Node:

Create (cb:CricketBoard {BoardID: "B1D01", Name: "Chennai Cricket Board", Address: "Chennai", Phone: 9981776699}) + return cb.

Create Team Nodes:

Create (t1: Team {teamID: "CCB01", BoardID: "B1D01", name: ABS Express, coach: G.O. RAMESH, Captain: "SAMPATH KUMAR"}) return t1.

Create (t2: Team {teamID: "CCB02", BoardID: "B2D01", name: "AUG Express", coach: "T. KARTHIK", Captain: "Y. JOHN"}) return t2.

Create Player Node:

Create (p1: Player {playerID: "1", TeamID: "CCB01", name: "Raj", age: 23, Date of Birth: "29-5-91 - 1996", PlayingRole: "Bowler", email: "rajn@smallicom") return p1

Create (p2: Player {playerID: "33", TeamID: "CCB01", name: "Anand", age: 23, Date of Birth: "02-3-91 - 1998", PlayingRole: "Batsman", email: "balajid@gmail.com"}) return p2

Create (p3: Player {playerID: "25", TeamID: "CCB02", name: "Rohit", age: 23, Date of Birth: "12-5-91 - 1996", PlayingRole: "Batsman", email: "srk@gmail.com"}) return p3.

Creating Relationship among Cricket Board and teams:

match (cb:CricketBoard {BoardID: "B1D01"}), (t1:Team {teamID: "CCB01"}) Create (cb) - [r:has] -> (t1) return p1, t1, t1.

match (cb:CricketBoard {BoardID: "B2D01"}), (t2:Team {teamID: "CCB02"}) Create (cb) - [r:has] -> (t2).

Creating Relationship among Player and teams:

match (p1: Player {playerID: "1"}), (t1: Team {teamID: "CCB01"}) Create (p1) - [r1: playsFor] -> (t1) return p1, r1, t1

match (p2: Player {playerID: "33"}), (t1: Team {teamID: "CCB01"}) Create (p2) - [r2: playsFor] -> (t1) return p2, r2, t1

match (p3: Player {playerID: "25"}), (t2: Team {teamID: "CCB02"}) Create (p3) - [r3: playsFor] -> (t2) return p3, r3, t2

match (p1: Player {playerID: '75'}) , (t2: Team {teamID: 'CCB01'})

Create (P3) - [r4: playFor] → (t2) return p1, r4, t2.

Display All nodes: match(n) return n



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Result: Thus the CRUD operation like Creating, inserting, querying, finding, ~~deleting~~ operation on graph spaces executed successfully.