Step 1: Creating SKOS

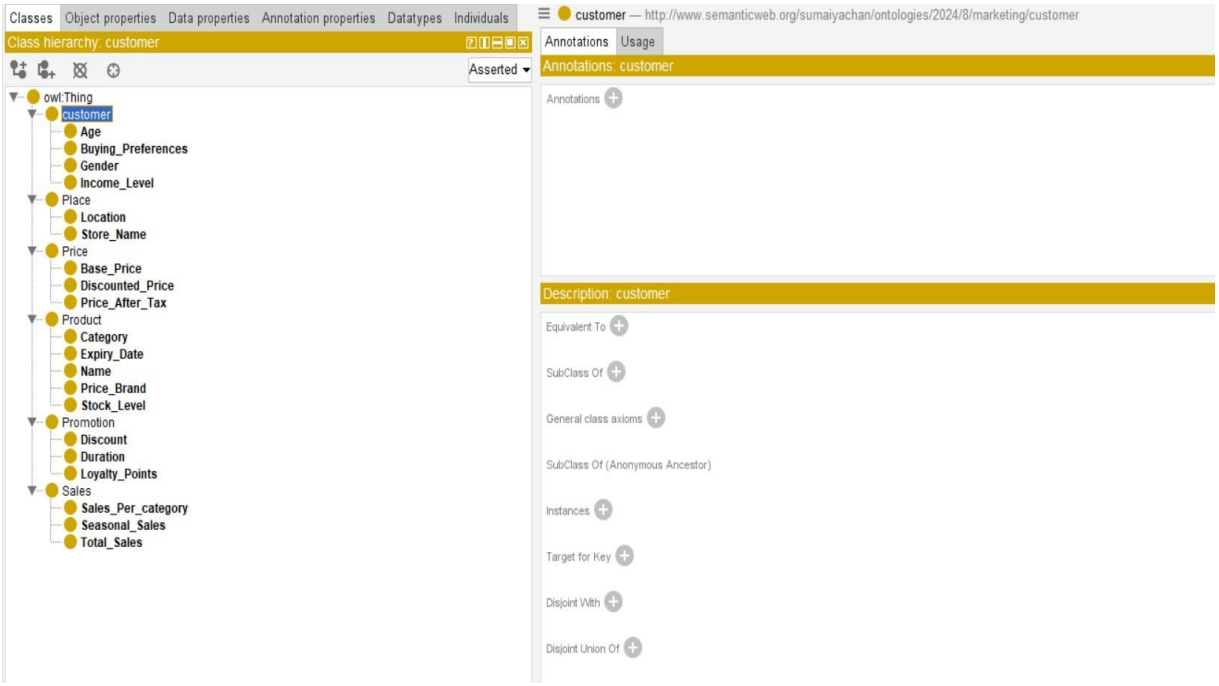

Fig 1

The ontology in the image is about customers and their attributes, such as age, gender, income level, buying preferences, location, and purchase history. The ontology also includes information about products, prices, promotions, and sales.

Step 2: Object Properties

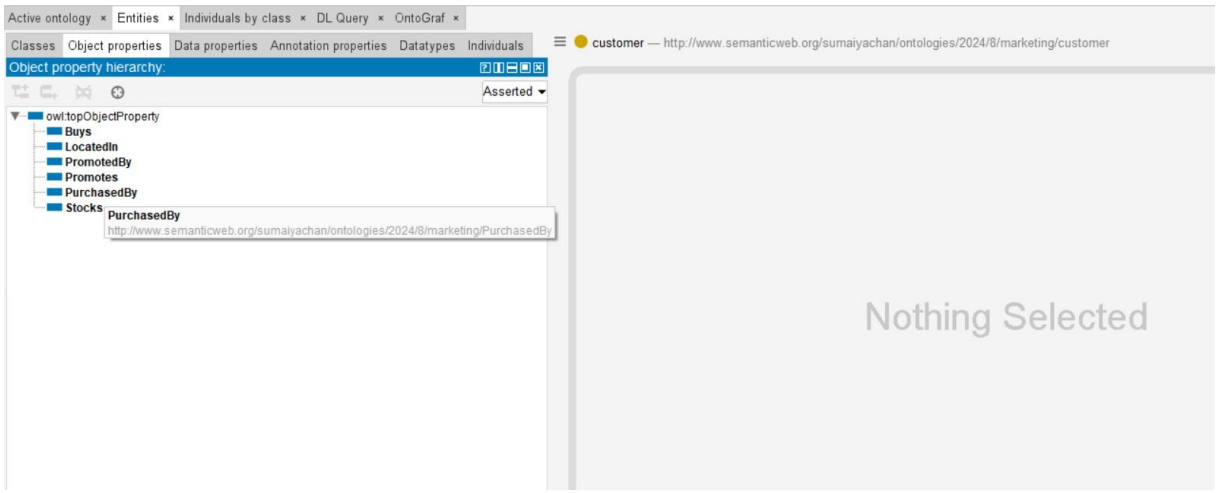

Fig 2

This tab lists all of the object properties defined in the ontology. Object properties are used to relate objects to each other. For example, the PurchasedBy property relates a Sale to a Customer.

Step 3:Data Properties

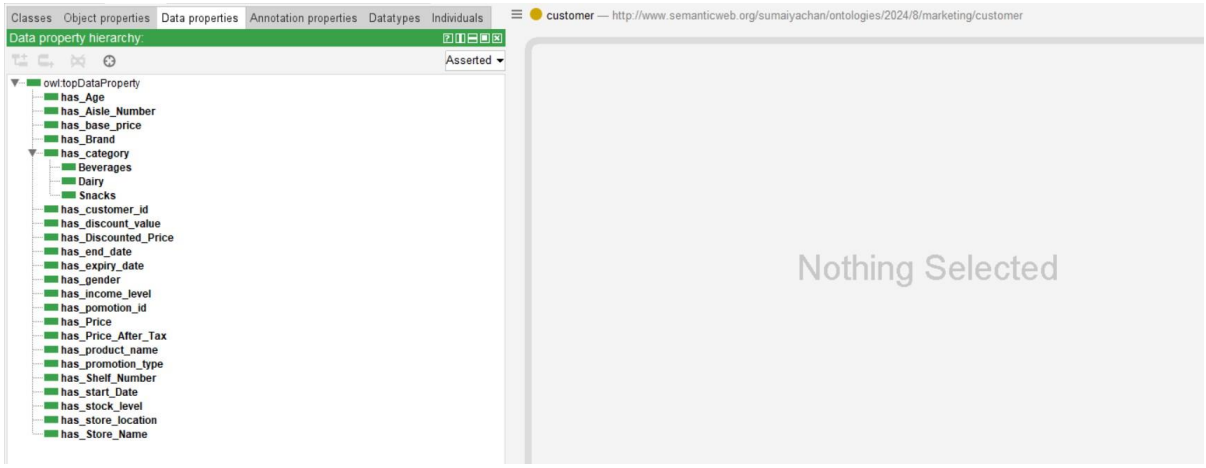

Fig 3

Data properties:

- **has_Name:** Describes the name of a person, place, or thing.
- **has_Address:** Describes the address of a location.
- **has_BirthDate:** Describes the birth date of a person.
- **has_PhoneNumber:** Describes the phone number of a person or organization.
- **has_Email:** Describes the email address of a person or organization.
- **has_Salary:** Describes the salary of an employee.
- **has_Price:** Describes the price of a product.

Step 4: Visualizing in OntoGraf

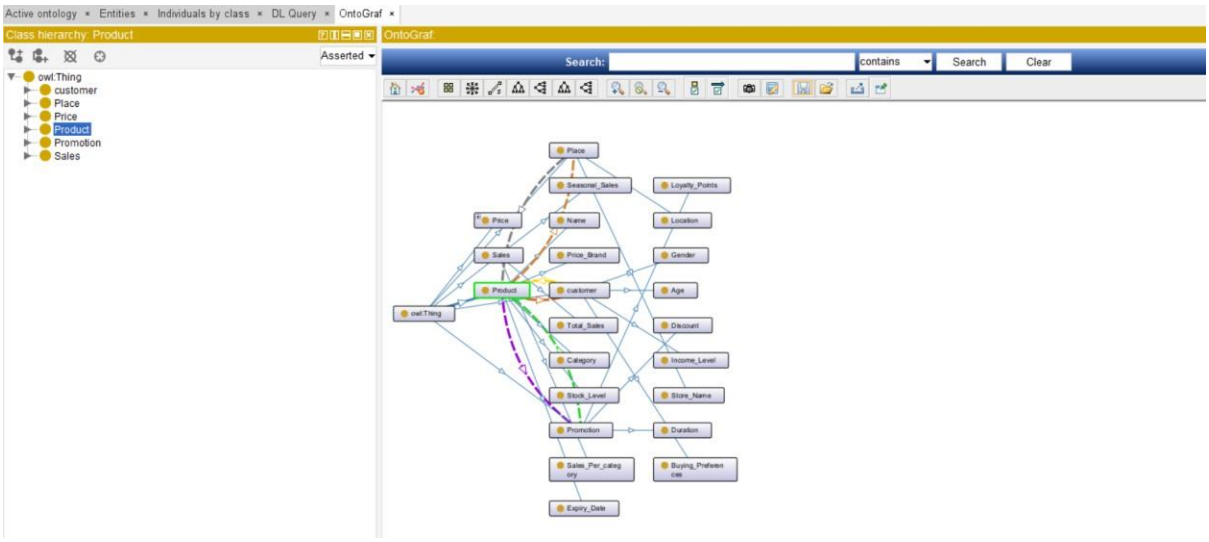

Fig 4.1

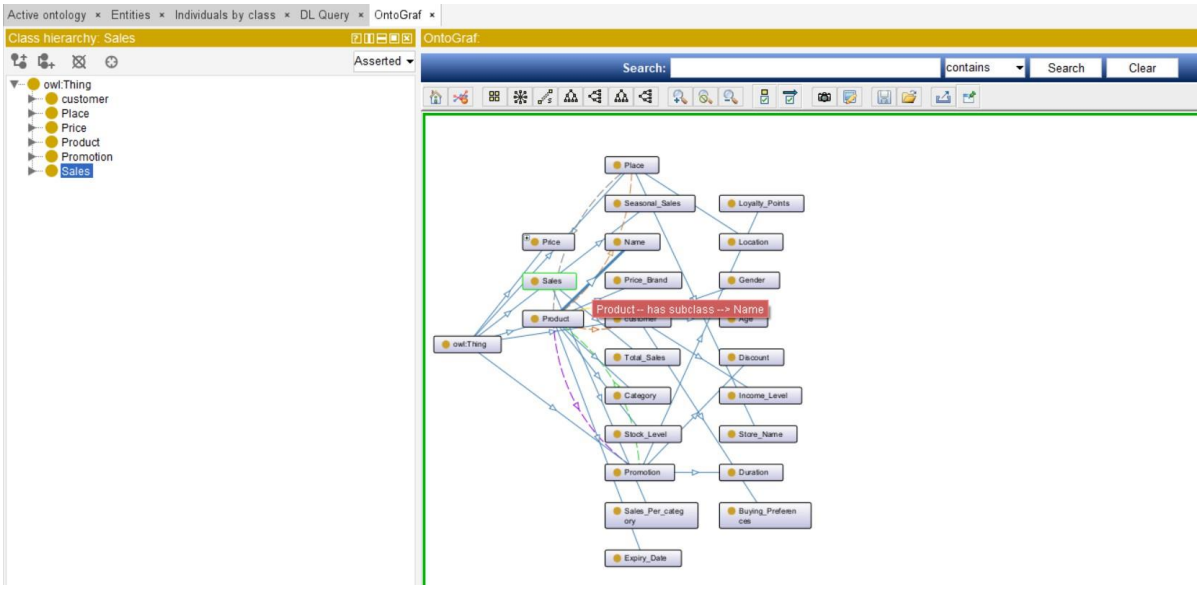

Fig 4.2

Step 5:

Once it's over, need to save the locally and import that file in google colab notebook for Topic Modelling. Once it's done save the file in .csv format.

Google Colab link :
https://colab.research.google.com/drive/1RZ3mf0Jskt9ucvowSs3OJs_GoagDJJWE?usp=sharing

Step 6: Create a Graph DB in Neo4j

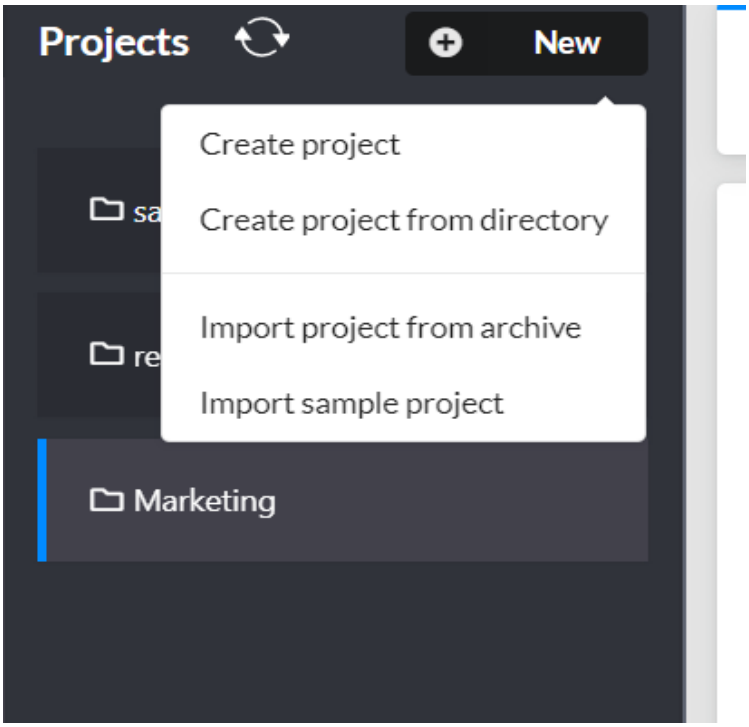

Fig 6

Step 6.1 : Name the file as Marketing and active the Database

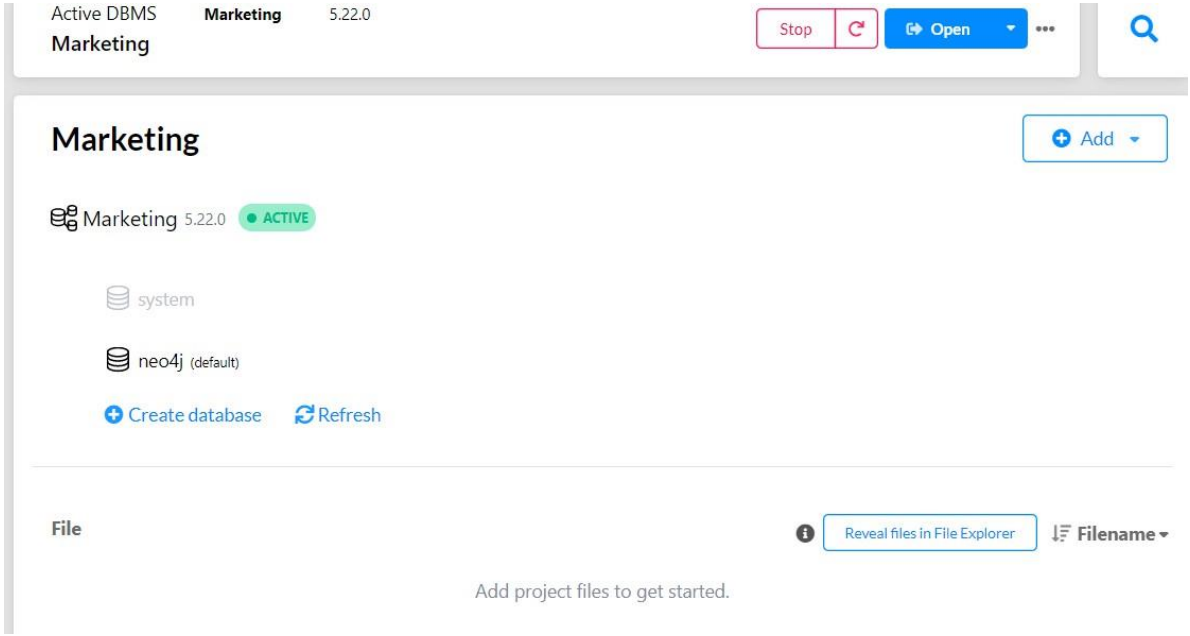

Fig 6.1

Step 6.2 : Import the csv file in the required path

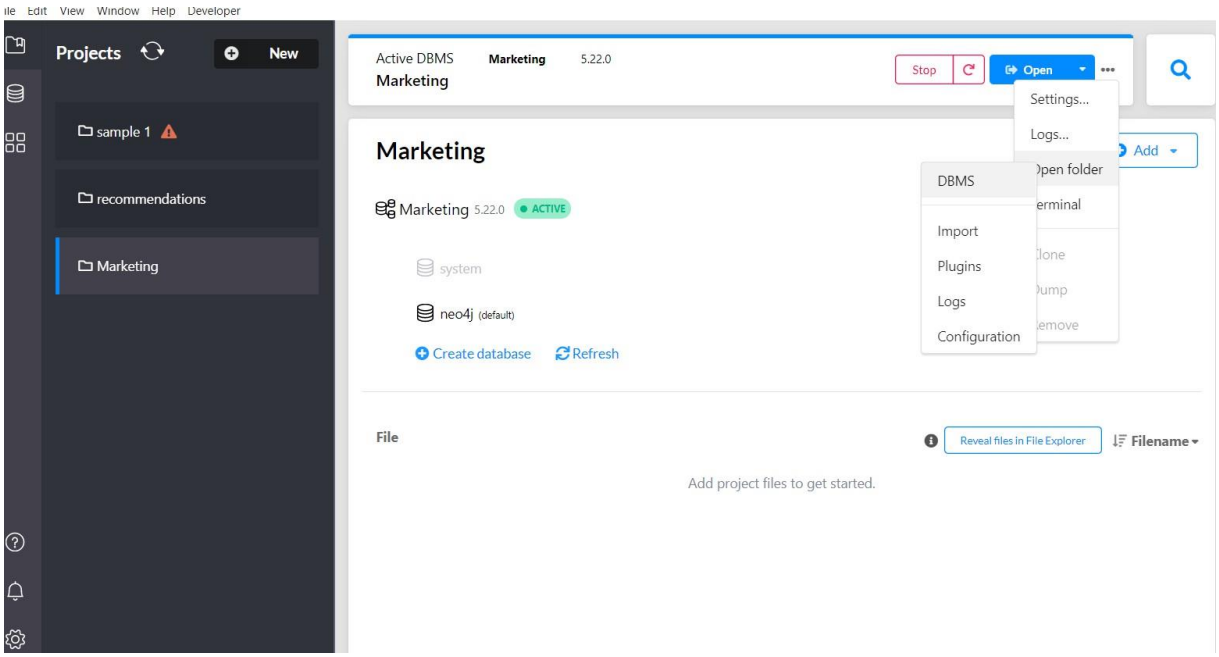

Fig 6.2

Step 6.3 : Click open to get the Neo4j Browser page

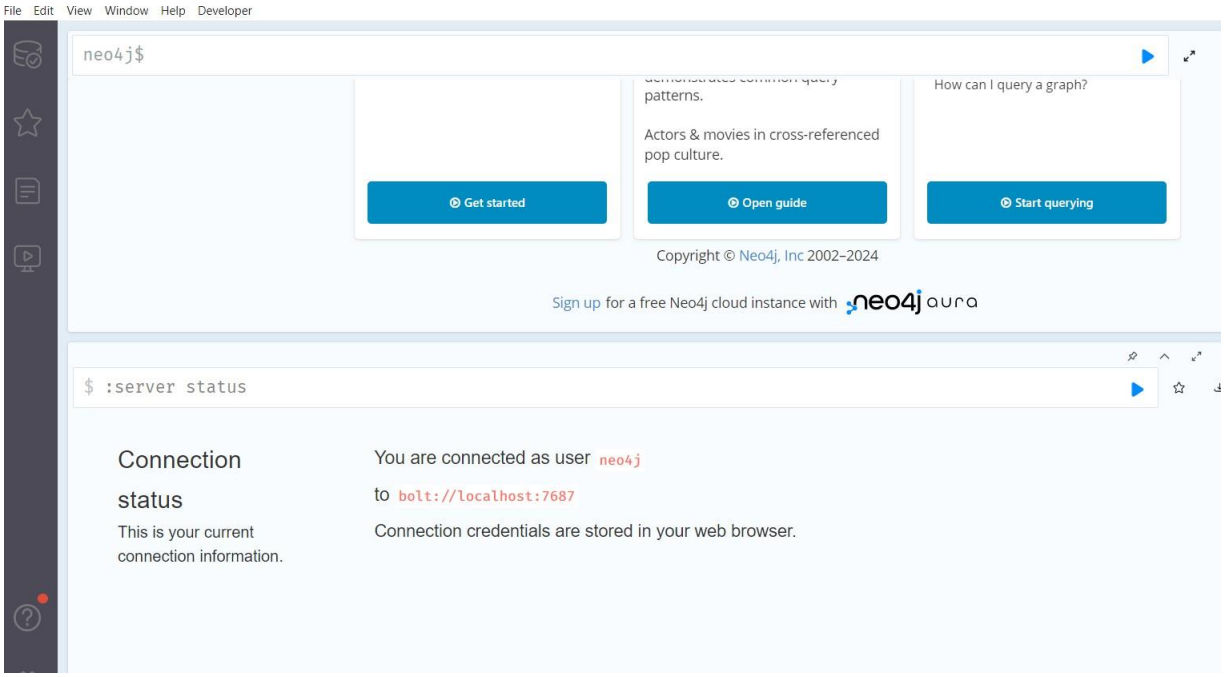

Fig 6.3

Step 6.4 : Connect the classes ,subclasses , object property ,data property

Fig 6.4.1

Fig 6.4.2

Fig 6.4.3

Fig 6.4.4

Step 6.5 : View the Entire graph

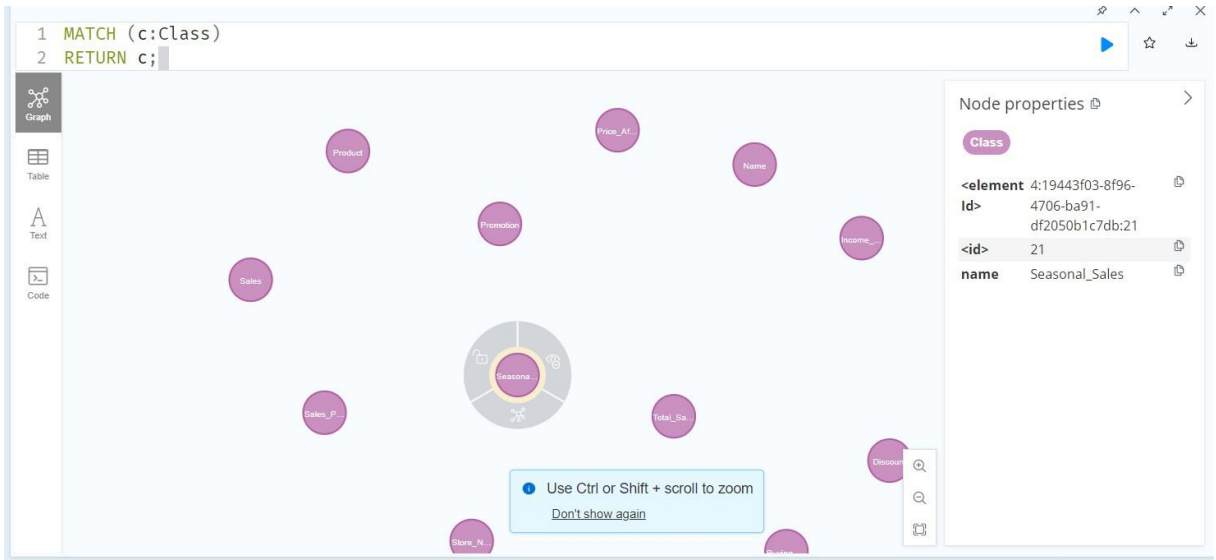

Fig 6.5.1

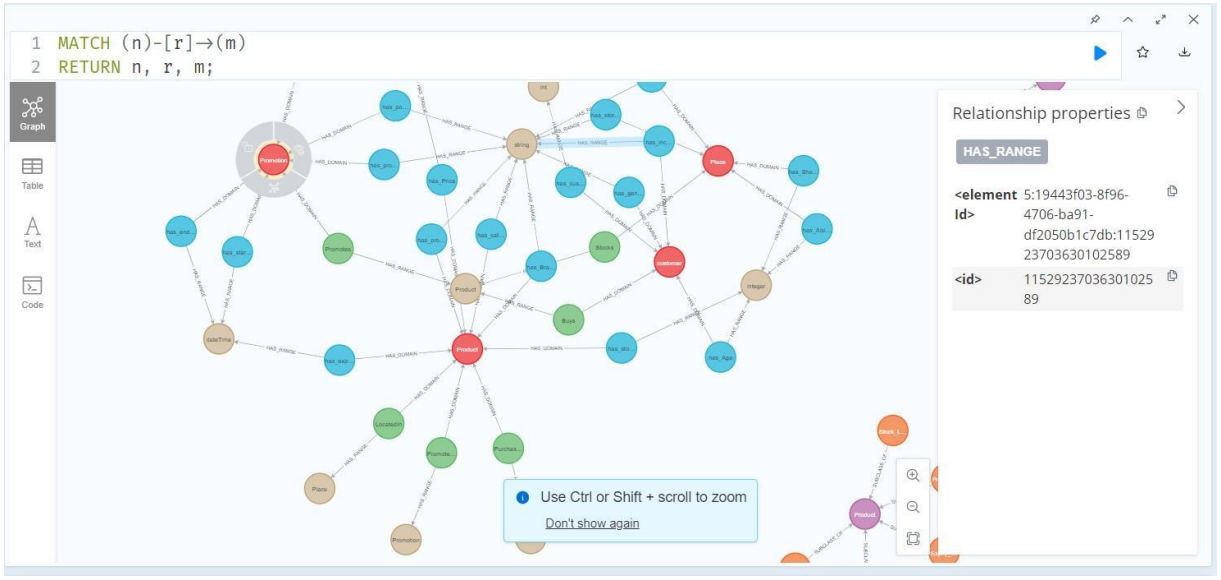

Fig 6.5.2

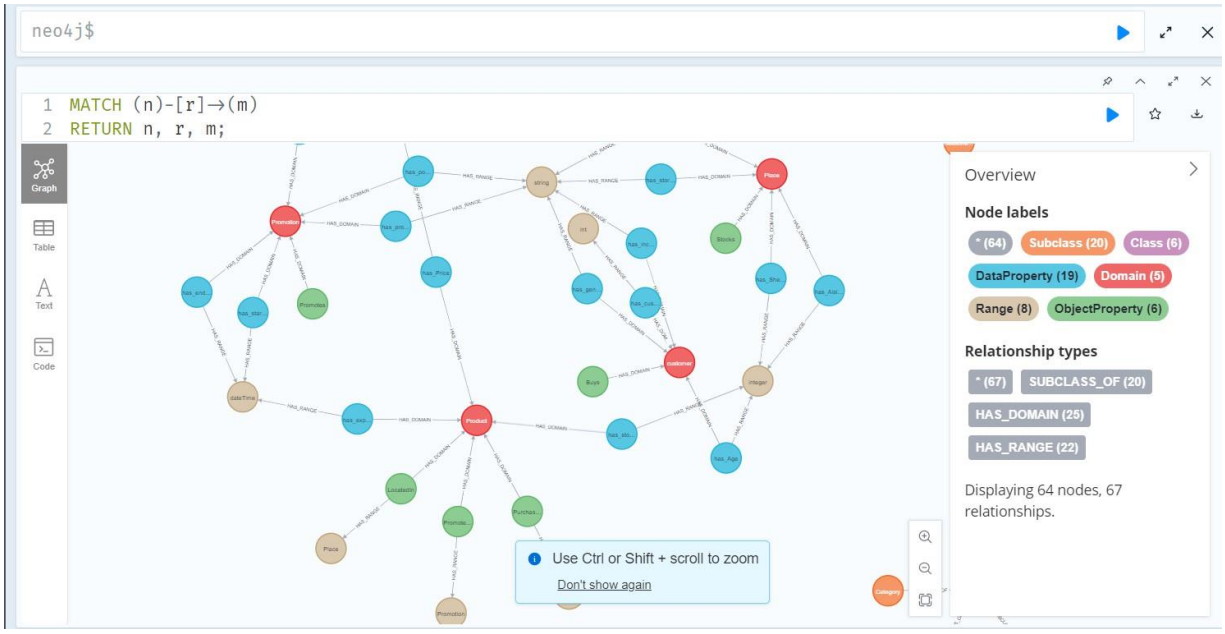

Fig 6.5.3