Data Analyst Portfolio Project

"Olympic Games Analysis"

Bedirhan Albayrak

Content

1- Business Request

"As a data analyst working at a news company, you are asked to visualize data that will help readers understand how countries have performed historically in the Summer Olympic Games.

You also know that there is an interest in details about the competitors, so if you find anything interesting, don't hesitate to bring that in.

The main task is still to show historical performance for different countries, with the possibility to select your own country."

2- Data Cleaning and Transformation with SQL

To create the necessary data model for data analysis and fulfilling our business request, the following tables were extracted from the database by using SQL.

I used 2 tables from the database.

The SQL statements for cleaning and transforming necessary data are shown below.

Athletes_event_results Table:

```sql
--Cleaned athletes_event_results table--


SELECT
        [Name] AS 'Competitor Name'
        ,CASE WHEN Sex = 'M' THEN 'Male' WHEN Sex = 'F' THEN 'Famale' END AS Sex
        ,[Age]
        ,CASE
            WHEN Age < 18 THEN 'Under 18'          -- Grouping competitors by age.
            WHEN Age Between 18 and 25 THEN '18-25'
            WHEN Age BETWEEN 26 AND 30 THEN '26-30'
            WHEN Age > 30 THEN 'Over 30'
            END AS 'Age Grouping'
        ,[Height]
        ,[Weight]
        ,[NOC] AS 'Nation Code'
        ,LEFT(Games, CHARINDEX(' ', Games) - 1) AS Year  -- Spliting column to find year information from Games column.
        ,RIGHT(Games, CHARINDEX(' ', REVERSE(Games)) - 1) AS Season -- Spliting column to find season information from Games column.
        --[City] -- It is not nessesary for the analysis.
        ,[Sport]
        ,[Event]
        ,CASE WHEN Medal = 'NA' THEN 'Not Registered' ELSE Medal END AS Medal -- Replaces 'NA' with 'Not Registered'.
FROM [olympic_games].[dbo].[athletes_event_results]
WHERE RIGHT(Games, CHARINDEX(' ', REVERSE(Games)) - 1) = 'Summer' -- Adding where clause to bring only Summer Games.
```
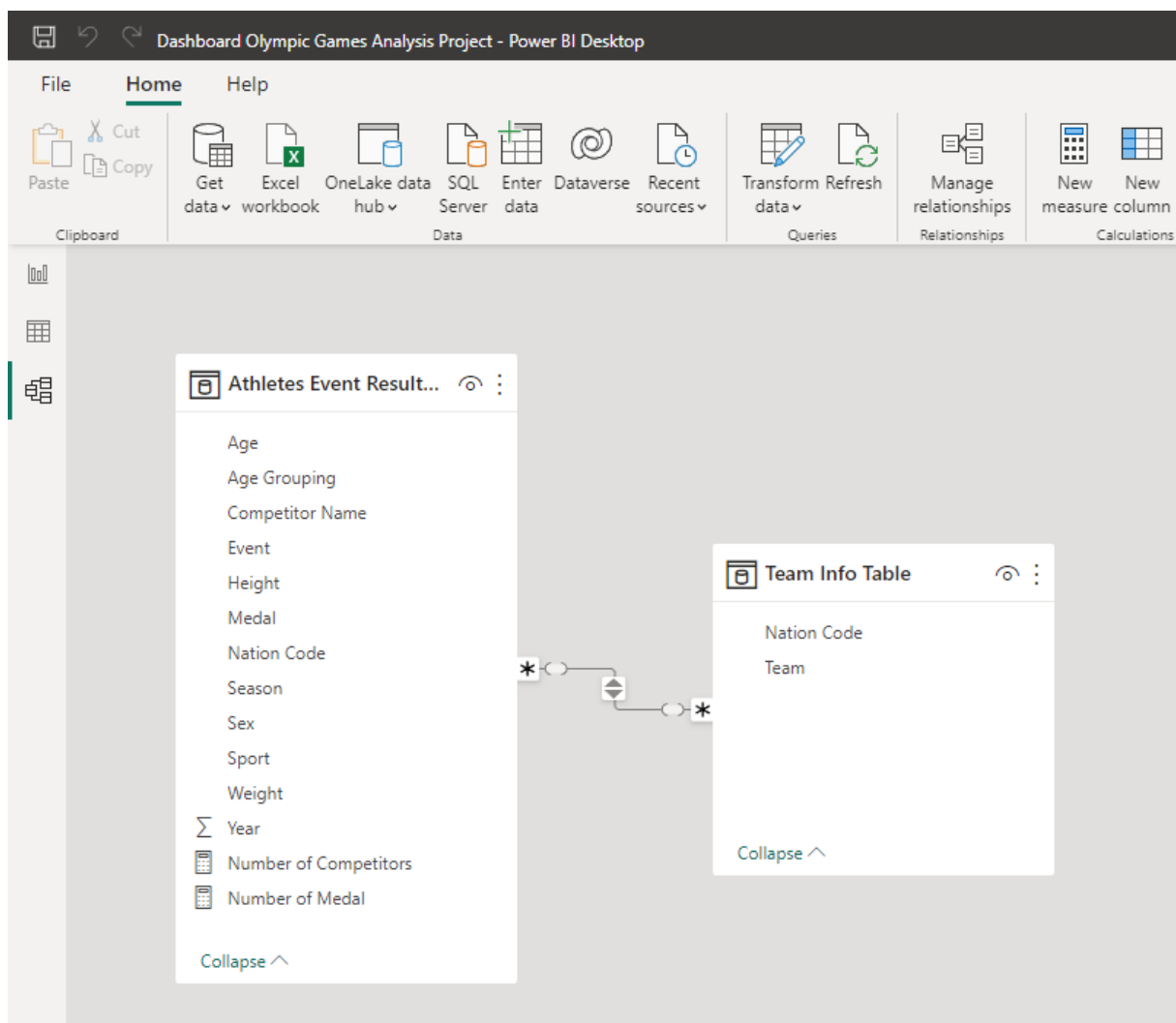
Team_info Table:

```sql
--Cleaned team_info table--

]SELECT DISTINCT
     NOC AS 'Nation Code'
    ,Team
FROM [olympic_games].[dbo].[team_info]
```

3- Data Model

I created a data model after cleaning and preparing tables which were imported into Power BI shown below.
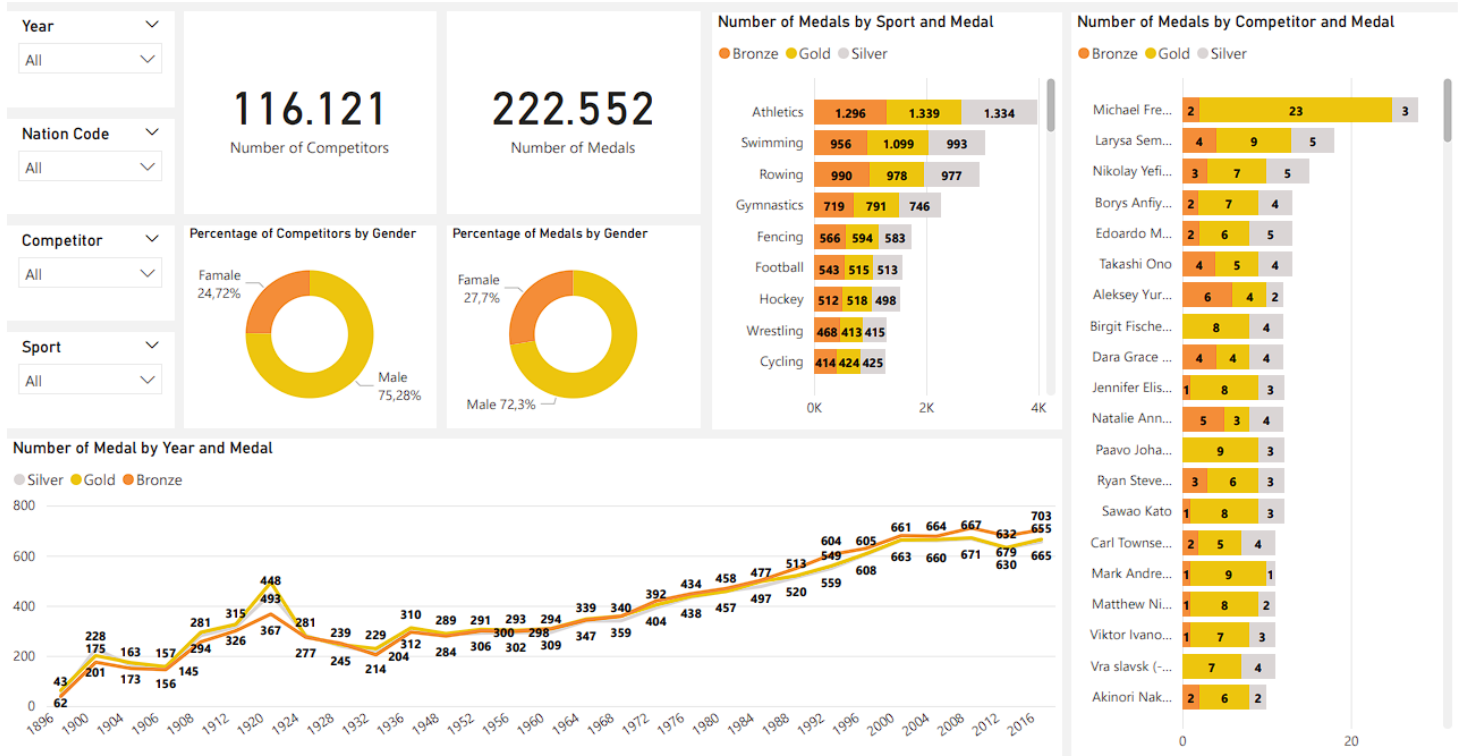
You can see which and how tables are integrated with each other.

4- Olympic Games Analysis Dashboard

In light of the data analysis given above, I created one paged Olympic Games Analysis Dashboard.

You can also click this sentence to open this dashboard online and use it dynamically.