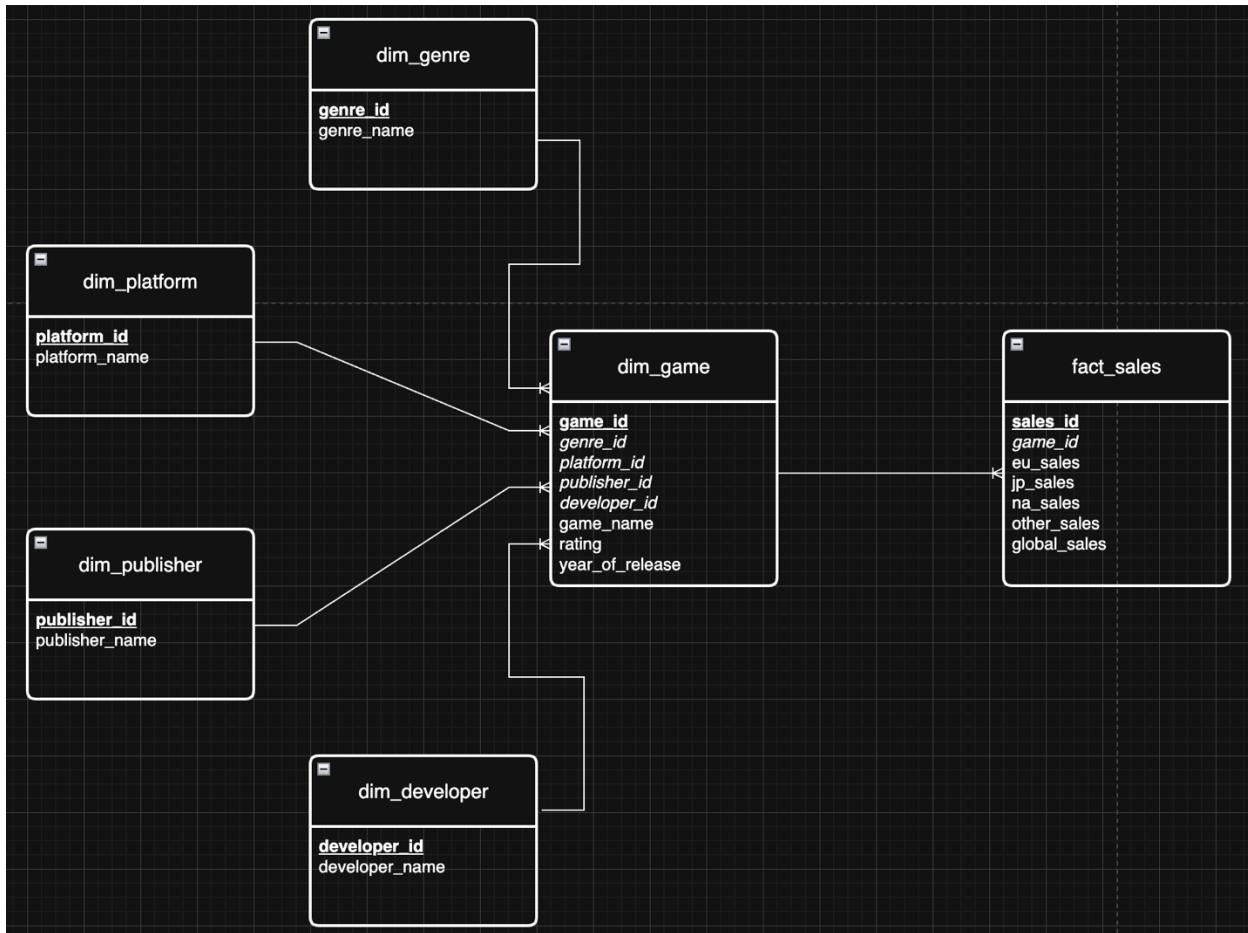


**DQML Final Project**  
**Video\_Game\_Sales\_and\_Analytics**  
**Database**

**Report On Dimensional Modeling & ETL**

## Star Schema Diagram



## Fact Table Grain Definition

**Fact Table:** fact\_sales

**Grain:**

Each record in the fact\_sales fact table represents the sales performance of a single video game title, aggregated at the individual game level.

**This means:**

- One row = One game's sales metrics across various regions (NA, EU, JP, Other)
- The fact table is not broken down by time, not broken down by platform, not broken down by region
- The granularity is 1 row per game\_id

## **Why this grain?**

- The original dataset provides sales per game, not per time period or detailed event.
- This grain aligns directly with the analytics focus of the project: comparing game performance, publisher trends, genre-based sales insights, and platform-specific game distribution.

## **Dimension Tables and Their Purpose**

### **1.Dimension:** dim\_game

#### **Purpose:**

Provides rich descriptive attributes for each game title, enabling slicing of sales data by:

- Genre
- Platform
- Publisher
- Developer
- Rating
- Year of Release

#### **Why it's important:**

This dimension acts as the central descriptive hub that connects to all other lookup dimension tables.

### **2.Dimension:** dim\_genre

#### **Purpose:**

Contains the list of distinct game genres. Enables analysis like:

- Top-selling genres
- Genre trends
- Genre contribution to total sales

#### **Why it matters:**

Genre is often a primary driver of game popularity and sales forecasting.

### **3.Dimension:** dim\_platform

#### **Purpose:**

Stores information about the platform (e.g., PlayStation, Xbox, PC, Nintendo).

Enables reporting on:

- Platform market share
- Platform-specific best-selling games

#### **Why it matters:**

Platform preference varies significantly across regions and demographics.

#### **4.Dimension:** dim\_publisher

##### **Purpose:**

Describes game publishers.

Enables analysis such as:

- Which publishers release the most high-selling games?
- Publisher-based market dominance trends

##### **Why it matters:**

Publisher strategies often influence release timing, marketing, and sales outcomes.

#### **5.Dimension:** dim\_developer

##### **Purpose:**

Stores developer information.

Allows insights such as:

- Developer performance
- Developer specializations in certain genres or platforms

##### **Why it matters:**

Developers strongly impact game quality, audience appeal, and long-term sales.

## **Summary**

The star schema is designed to optimize analytical queries on video game sales. The structure supports:

- Fast aggregation
- Easy filtering and slicing
- Clear separation between facts (numeric, additive metrics) and dimensions (descriptive attributes)

This dimensional model ensures efficient analytical processing, aligns with best practices, and fully supports the analytical requirements of the dataset.

**Github Repo Link :** [https://github.com/prajesh-1003/Video\\_Game\\_Sales\\_and\\_Ratings\\_Analytics](https://github.com/prajesh-1003/Video_Game_Sales_and_Ratings_Analytics)