Documentation of the Database

Data Source: The VideoGamesSalesDB database sources its data from a Kaggle dataset, available in this link- https://www.kaggle.com/datasets/gregorut/videogamesales . This dataset created by Gregory Smith (generated by scraping website- vgchartz.com), comprises comprehensive sales data for video games.

License Information: The licensing information for this dataset is unknown (yet to be clarified by dataset creator), as of current date.

Number of Tables: The database contains four tables:

1. **Games**
2. **Publisher**
3. **Genre**
4. **Platform**

Number of Attributes: Each table have various attributes relevant to their specific focus. The Games table includes attributes such as Rank, Title, PlatformName, ReleaseDate, GenreName, PublisherName, NA_Sales, EU_Sales, JP_Sales, Other_Sales and Global_Sales. The Genre table includes attributes such as GenreID and GenreName. The Publisher table includes attributes such as PublisherID and PublisherName. The Platform table includes attributes such as PlatformID and PlatformName. Overall, these 4 tables consist of 12 unique attributes.

Documented Business Rules-

Unique Game Rank: Each game in the Games table has a unique identifier (Rank), enforced by a primary key constraint on the Rank attribute.

Appropriate and Valid Genre, Platform, and Publisher References: The Games table references valid entries in the Genre, Platform, and Publisher tables through GenreID, PlatformID, and PublisherID, maintained through foreign key constraints.

Non-null Essential Information: Critical attributes like the game's title, genre name, platform name, and publisher name must be non-null, ensuring complete data records.

Explanation of Queries Produced-

Post-2010 Game Sales (Query 1): Selects games released after 2010 and calculates their total sales, aiding in analyzing recent game performance.

Games and Publishers Join (Query 2): Joins the Games and Publisher tables, providing a comprehensive view of games alongside their publishers' names.

Genre-based Sales Averages (Query 3): Groups games by genre to calculate average global sales per genre, useful for market trend analysis.

Above-Average Sales Games (Query 4): Identifies games whose global sales exceed the overall average, highlighting high performers.

Dynamic View of Game Publishers (Query 5): Involves creating and using a view (GamePublisherInfo) that combines game data with publisher information, reflecting updates in the underlying Games table.

Stored Procedures Usage-

DeleteLast10Rows:

Purpose: Deletes the last 10 entries in the Games table.

Usage: Call with CALL DeleteLast10Rows (@rowsDeleted);.

Returns: The number of rows deleted is stored in @rowsDeleted.

UpdateLastRowSales:

Purpose: Updates sales figures for the last game entry and recalculates its global sales.

Usage: Call with CALL UpdateLastRowSales(newNA_Sales, newEU_Sales, @affectedRank); where newNA_Sales and newEU_Sales are the updated sales figures.

Returns: The rank of the updated game is returned in @affectedRank.