**DBS211 Final Project – Milestone 3**

**Topic: Video Game Review Database**

**Group 1**

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# Milestone 1

## Introduction

The video game review industry is a large industry that revolves around critics reviewing the newest video games in order to help consumers with their decision when it comes to purchasing games, as well as giving video game publishers and developers the information they need to create better products. This product was primarily chosen by our group not only out of passion for gaming, but because the idea of reviews benefits both consumers and major companies, which provides a broad scope to work with and refine.

## Problem Statement

The software application being created here is a website where users can publish reviews. The purpose of creating a database is to store information regarding video games and their respective developers and publishers. Additionally, data related to users and user interactions will also need to be stored in the database.

## Solution

This database will be built with a focus on users being able to leave reviews, write comments, and like each others’ comments and reviews. These tables will all be linked together in some way through foreign keys. Then the game table will be implemented, allowing users to leave reviews or like games. Lastly, these games will be connected to developers and publishers that will act as a way to group games together via common threads. The game and review table will contain the bulk of the data that will be used for data reports, with user ratings and several attributes and the game table being significant.

## Requirements

* User login (username and password)
* User likes
* Reviews
* Game average rating
* Games
* Publishers
* Developers
* User interaction (liking and commenting)

# Milestone 2

## Data Dictionary

TABLE: **DEVELOPER**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| developerID | NUMBER | 4 |  | PK | Y | 1-9999 | 1234 | Autonumbered identity |
| developerName | String | 50 |  |  | Y |  | “Nintendo EAD” |  |
| dateFounded | DATE |  |  |  | Y |  | 1-1-1879 |  |
| countryOfOrigin | String | 30 |  |  | Y |  | “Japan” |  |

TABLE: **DEVELOPER\_GAME**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| developerID | NUMBER | 4 |  | PK  FK | Y | 1-9999 | 1234 | Autonumbered identity from the Developer table |
| gameID | NUMBER | 6 |  | PK  FK | Y | 1-999999 | 1234 | Autonumbered identity from the Game table |

TABLE: **PUBLISHER**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| publisherID | NUMBER | 4 |  | PK | Y | 1-9999 | 1234 | Autonumbered identity |
| publisherName | STRING | 50 |  |  | Y |  | “Nintendo” |  |
| dateFounded | DATE |  |  |  | Y |  | 1-1-1879 |  |
| countryOfOrigin | String | 30 |  |  | Y |  | “Japan” |  |

TABLE: **PUBLISHER\_GAME**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| publisherID | NUMBER | 4 |  | PK  FK | Y | 1-9999 | 1234 | Autonumbered identity from the  Publisher table |
| gameID | NUMBER | 6 |  | PK  FK | Y | 1-999999 | 1234 | Autonumbered identity from the Game table |

TABLE: **GAME**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| gameID | NUMBER | 6 |  | PK | Y | 1-999999 | 1234 | Autonumbered identity |
| gameTitle | String | 50 |  |  | Y |  | “Minecraft” |  |
| gameGenre | String | 30 |  |  | Y |  | “Survival” |  |
| copiesSold | NUMBER | 10 | 0 |  | N | 0-9999999999 | 400 | Number of copies sold worldwide |
| salesRevenue | NUMBER | 12,2 | 0.00 |  | N | 0-9999999999 | 5123 | Sales revenue in USD |
| gameVersion | String | 10 |  |  | N |  | “V1.20” |  |
| releaseDate | DATE |  |  |  | N |  | 2-1-2002 |  |
| releasePrice | NUMBER | 4,2 |  |  | N | 1-999 | 59.99 | Price in USD |

TABLE: **REVIEW**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| reviewID | NUMBER | 6 |  | PK | Y | 1-999999 | 123456 | Autonumbered identity |
| userID | STRING | 20 |  | FK | Y |  | “e” | userID imported from User table |
| gameID | NUMBER | 6 |  | FK | Y | 1-999999 | 1234 | Imported from game table |
| reviewTitle | String | 100 |  |  | Y |  | “A review of Minecraft” |  |
| reviewDate | DATE |  |  |  | Y |  | 05-02-1999 |  |
| reviewContents | String | 100 |  |  | Y |  | “This game is very good” | Size is lower for sake of management at this level |
| gameRating | NUMBER | 2 |  |  | Y | 1-10 | 9 | Rating out of 10 |

TABLE: **USERS**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| userID | STRING | 20 |  | FK | Y |  | “e” | Created by user |
| userFullName | String | 50 | “” |  | N |  | “Mike Stevens” | Optional |
| dateCreated | DATE |  |  |  | Y |  | 08-12-2015 | Autogenerated when account is created |
| password | String | 20 |  |  | Y | 20 chars | “apple123” | Stored in hash values |

TABLE: **COMMENTS**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| commentID | NUMBER | 6 |  | PK | Y | 1-999999 | 1231 | Autogenerated when comment is created |
| reviewID | NUMBER | 6 |  | FK | Y | 1-999999 | 123456 | Imported from review table |
| userID | STRING | 20 |  | FK | Y |  | “e” | Imported from User table |
| commentDate | DATE |  |  |  | Y |  | 08-12-2015 | Autogenerated when comment is created |
| commentContents | String | 1000 |  |  | Y |  | “This review is very good” |  |

TABLE: **LIKE\_COMMENT**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| userID | STRING | 20 |  | FK | Y |  | “e” | Autogenerated ID imported from user table |
| commentID | NUMBER | 6 |  | PK  FK | Y | 1-999999 | 1231 | Autogenerated ID imported from comment table |

TABLE: **LIKE\_GAME**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| userID | STRING | 20 |  | FK | Y |  | “e” | Autogenerated ID imported from user table |
| gameID | NUMBER | 6 |  | PK  FK | Y | 1-999999 | 1234 | Imported from game table |

TABLE: **LIKE\_REVIEW**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Size, Precision** | **Default** | **PK/FK** | **Required** | **Range** | **Sample Data** | **Notes** |
| userID | STRING | 20 |  | FK | Y |  | “e” | Autogenerated ID imported from user table |
| reviewID | NUMBER | 6 |  | PK  FK | Y | 1-999999 | 123456 | Autonumbered identity imported from review table |

## Entity Relationship Diagram

A picture containing text, map, indoor, white

Description automatically generated

## Business Report Descriptions (Also in comments in file)

View 1: The purpose of this report is to show all the reviews that a specific game has received. This can help the developers easily understand what reviewers liked and disliked about their game. Additionally, this can help consumers easily determine whether or not they think they would like the game.

View 2: The purpose of this report is to sort games by their revenue. This can help prospective investors determine if they want to invest in a certain publisher or developer. It can also show developers and publishers where they stand income-wise compared to other companies.

View 3: The purpose of this report is to view all games from a specific publisher. This can help buyers make decisions more easily and potentially help them notice games that they will enjoy that they otherwise would not have seen.

View 4: The purpose of this report is to show how many likes a review has. This can help the review company determine exactly how much a specific reviewer should be paid for their work. Higher numbers and interactions would result in a bonus for the reviewer.