**Date**: 07-11-2023

**To**: Chris Cusack

**From**: Bogdan Teodorov

**Subject**: Windows Form Application for Renting Games Documentation

Dear Mr. Cusack,

I am writing to provide documentation for the Windows Form application designed for renting games. This application is intended to create, manipulate, search, and browse records within a SQL Server database. The database design includes three tables, with two tables related through a many-to-many relationship and two essential business rules.

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# Application Overview:

The "Renting Games" application is designed to manage a collection of games available for rent. Users can browse, search, and rent games, while administrators can add, edit, and manage the game inventory.

# 2. Database Structure:

The application's database consists of three main tables:

**a. Games:**

* GameID (Primary Key)
* Title
* Genre
* Release Date
* Description
* Rental Price
* Rate

**b. Customers:**

- CustomerID (Primary Key)

- Name

-Age

- Email

- Phone

**c. Rentals:**

- RentalID (Primary Key)

- GameID (Foreign Key to Games)

- CustomerID (Foreign Key to Customers)

- Rental Date

- Due Date

- Return Date

# 3. Many-to-Many Relationship:

The "Rentals" table establishes a many-to-many relationship between games and customers, allowing multiple customers to rent multiple games. This relationship is essential for tracking game rentals and returns accurately.

# 4. Business Rules:

**a. Rental Expiry:**

- Games must be returned by the "Due Date" specified in the Rentals table.

- Overdue rentals will incur additional charges.

**b. Age and Rate Requirement:**

- Customers must be 18 years old or older to rent games with a specific rate.

- The "Rate" column in the Games table corresponds to the rate allowed for game rentals.

# 5. Application Functionality:

**Users can:**

- Browse the list of available games.

- Search for games by title, genre, or release date.

- Rent games, specifying the rental duration.

**Administrators can:**

- Add new games to the database.

- Edit game details.

- Monitor rentals and returns.

# 6. Technologies Used:

- Windows Forms for the user interface.

- C# programming language for application logic.

- SQL Server for database management.

If you have any questions or require additional information, please do not hesitate to contact me. I look forward to your feedback and suggestions for improvements.

Sincerely,

Bogdan Teodorov

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