Game Suggestor Project

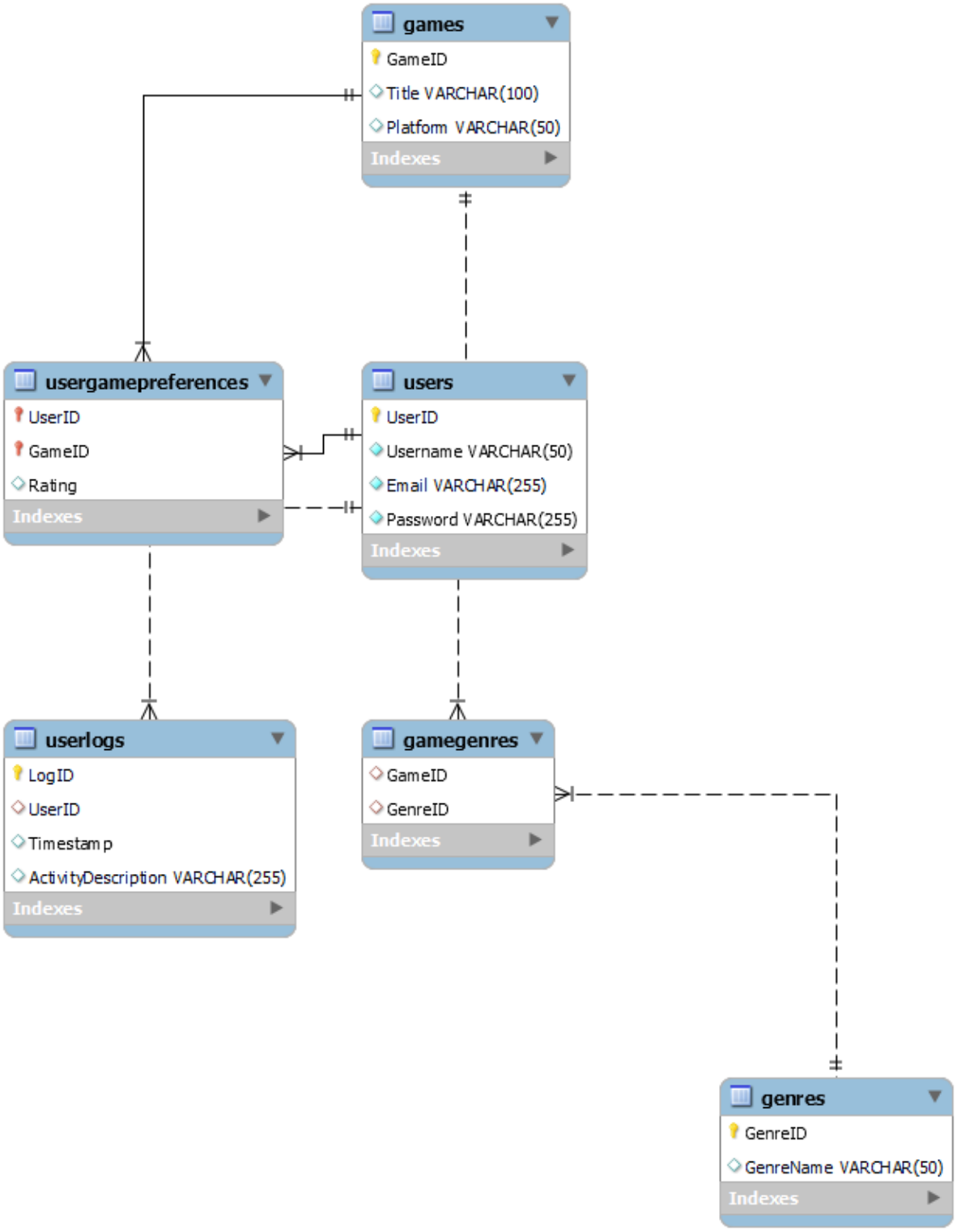
Introduction

The Game Suggestor project is a desktop application developed in C# using Windows Forms. The application suggests video games to users based on their preferred genres. The data about games and genres is stored in a MySQL database.

Database Design

The database for the Game Suggestor application consists of several tables:

- Genres: Stores the different genres of games.
- Games: Stores the games available in the application.
- GameGenres: A junction table that links games and genres, allowing a many-to many relationships.
- Users: Stores user information.
- UserGamePreferences: Stores user game preferences, including ratings.
- UserLogs: Logs user activity for future analysis.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GameID
Title VARCHAR(100)
Platform VARCHAR(50)
Indexes
usergamepreferences
UserID
GameID
Rating
Indexes
users
UserID
Username VARCHAR(50)
Email VARCHAR(255)
Password VARCHAR(255)
Indexes
userlogs
LogID
UserID
Timestamp
ActivityDescription VARCHAR(255)
Indexes
gamegenres
GameID
GenreID
Indexes
genres
GenreID
GenreName VARCHAR(50)
Indexes

Application Design

The application consists of three main forms: GameSuggestor, RateGame and AddGame.

GameSuggestor Form:

The GameSuggestor form is the main interface of the application. It allows users to select their preferred genres and suggests games based on their selections. The form contains three ComboBoxes, each of which can be used to select a genre. When a genre is selected, the application fetches game suggestions from the database that match the selected genre and displays them to the user.
The GameSuggestor form also includes functionality to log user activity. Each time a user selects a genre, the application logs this activity in the UserLogs table in the database.

RateGame Form:

The RateGame form allows users to rate games. When a user selects a game and submits a rating, the application updates the UserGamePreferences table in the database with the user's rating for that game.

This form is crucial for personalizing the game suggestions for each user. By rating games, users provide valuable feedback that the application can use to better understand their preferences. The more games a user rates, the more accurately the application can suggest games that the user will enjoy.

AddGame Form:

The AddGame form allows users to add new games to the database. The form includes a TextBox for entering the game name and several checkBoxes for selecting the genres of the game. When a new game is added, the application inserts a new record into the Games table and also updates the GameGenres table to associate the new game with its genres.

Aggregation Form (Information):

The Aggregate form is a part of your application that provides aggregated information from your database. It's designed to execute various SQL queries and display the results to the user. These queries include aggregate functions such as COUNT, AVG, MAX, MIN, and others to provide insights about the data.

Conclusion

The Game Suggestor project is a robust application that leverages a relational database to provide personalized game suggestions to users. The application demonstrates effective use of C# and SQL to interact with a MySQL database, showcasing skills in database design, SQL queries, and desktop application development.

Youtube Link: https://www.youtube.com/watch?v=eM4TOSRDfNM

GitHub Link: https://github.com/BirolYesiloglu/Game-Suggestor

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