Project Summary

Project Overview

This project, titled "My Video Game Library," is a web-based application designed to allow users to manage their personal collection of video games. The application provides user authentication, allowing users to sign up, log in, and access their personalized library. Each user has the ability to add new games to their library, view games with specific ratings, and delete games they no longer want in their collection. The platform emphasizes user-specific content and secure authentication.

Purpose and Functionality

The primary purpose of the site is to allow users to manage their video game collection in a personalized manner. The following functionalities are provided:

- User Authentication: Users can sign up and log in. Secure hashing is used for password storage, and unique emails are enforced to ensure data integrity.
- Personal Library: After logging in, users can access their personal library, where they can add new games, view their collection, and delete games.
- Game Filtering: The site provides separate views to filter games by rating, such as "E", "E10+", "T", and "M".
- Game Details: Each game in the personal library displays key information such as title, genre, platform, release date, completion status, and game rating. If available, an image of the game cover is also shown.

User Instructions

- Sign Up: New users can sign up by providing their first name, last name, email, and password. The system checks for unique emails and provides feedback if the email is already registered.
- Login: Registered users can log in using their email and password. If the credentials are correct, they are redirected to their personal library.
- Personal Library: After logging in, users can manage their game library, add new games, and delete existing ones.
- Filtering by Rating: Users can view separate pages for games with specific ratings (E, E10+, T, M).
- Secure Sessions: The application uses sessions to track logged-in users. Only authenticated users can access the personal library and other protected pages.

Data Source

The primary source of data for the application is a MySQL database (`oobed_videogames`). The database includes several key tables:

- users: Contains user information such as user ID, username, email, and hashed password.
- owned_games: Stores information about games owned by users, including game title, genre, release date, platform, completion status, game rating, and image link.
- completed_games: Records information about games completed by users, including completion dates.
- reviews: Allows users to leave reviews for games with associated ratings and review text.

Database Diagram

Extras Used

- Secure Sessions: Sessions are used for user authentication and protected content.
- Data Validation: Validation checks for unique email addresses during sign-up and secure hashing for passwords.
- Parameterized Queries: SQL queries are parameterized to prevent SQL injection attacks.

CSS Frameworks and Templates

The project uses Bootstrap 4.0.0 for the frontend design and layout. This framework provides responsive design and a consistent look and feel across the application. Specific templates for the sign-up and login pages are styled using Bootstrap's CSS classes.

Additional Notes

- Error Handling: The application includes error handling to display user-friendly messages in case of failed operations.
- Security: User authentication is handled with secure hashing, and only authenticated users can access personal content.
- Cross-Platform Compatibility: The application is designed to work across various devices and screen sizes, ensuring a responsive user experience.