

Video Game Library

Non-Functional Requirements

Performance:

Pages should load quickly frequently accessed content.

The system should be able to handle increasing user loads.

Scalability:

The system should support easy scaling to accommodate future growth in data and users.

The website should adapt to different screen sizes and devices (e.g., mobile, tablet, desktop).

Security:

Data stored securely, encrypted and protected from unauthorized access.

The system should be regularly scanned for vulnerabilities and relevant data privacy regulations (e.g., GDPR, CCPA).

Usability

Able to easily find the information and easy to navigate.

Organized content to easy understand. Accessibility features to support users with disabilities.

Reliability

The website should be available to users 24/7.

Gracefully handle errors and backups of data should be performed to prevent data loss.

Maintainability:

Modular the code to facilitate easy maintenance and updates.

Tracking changes by using version control like GitHub.

Functional Requirements

User Management

Users should be able to register with an email and password.

Users should be able to update their profile information like activity and favorite games.

Users should be able to login, logout, recover passwords and delete their accounts.

Game Management

Admins should be able to add, edit and delete games to their library.

Users should be able to search for games by title, genre, platform, etc.

Display average ratings and user reviews on game detail pages.

The website should provide personalized game recommendations based on user preferences.

Each game must include title, description, genre, publisher, release date, system requirements, cover art etc.

Users must be able to sort by popularity or release date.

Users should be able to add games to their favorites.

Users must be able to report incorrect information about the games.

User should be able to export (csv) and delete their history.

Notifications:

Implement email notifications for important events (e.g., new game releases, updates to wishlist games).

Use Cases

User Registration

- **Actor:** new user.
- **Description:** A new user visits the website and creates an account. The user provides their email address, password, and other required information. User account is created, and the user is logged in.

Game Addition

- **Actor:** Admin
- **Description:** An admin adds a new game to the library by providing game details. Admin is logged in into the game management page to add a new game. The new game is added and visible.

Game Search

- **Actor:** User
- **Description:** A user visits the website and searches for a game. The user enters a keyword or phrase into the search bar. Search results are displayed a list of matching games.

Game Recommendation

- **Actor:** User
- **Description:** user is logged in and wants to discover new games. The website analyzes the user's gaming history and preferences. The website recommends a list of games that the user might enjoy.