**200 items to be entered.**

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**Texto

Descrição gerada automaticamente**

**Summary of Fixes and Enhancements for the Star Wars Universe Website**

**Overview**

In this project, I have implemented several enhancements and optimizations to improve both the data entry process and the overall functionality of the website. These changes include streamlining data entry for large datasets, adding file attachment capabilities, and integrating an authentication system for secure access to administrative pages. Below is a summary of the key changes made, along with descriptions of each page or feature, and the rationale behind the modifications.

**1. Movies Section**

* **Admin Movies Index Page (admin/movies/index.php)**  
  *Description:*  
  I modified the existing movies index page to include a new file input field in the "Add New Movie" form. This allows administrators to attach a file (such as a movie poster or related document) when adding a new movie.  
  *Why:*  
  Adding the attachment field streamlines the process of associating visual or supplementary content with each movie entry. Instead of having a separate process for file uploads, this integrated approach makes data entry easier and more efficient, especially when handling a larger volume of records.
* **Add Movie Page (admin/movies/addmovie.php)**  
  *Description:*  
  I updated the add movie script to handle file uploads. The script now checks for a file, validates its type and size, creates an uploads directory if necessary, generates a unique file name, and stores the file path in the database along with the movie information.  
  *Why:*  
  This update optimizes the workflow by allowing administrators to upload attachments directly when adding movie data. It also ensures that files are securely and correctly stored, thereby improving the overall data integrity and user experience.
* **Other CRUD Pages (editmovie.php, del.php, viewdetails.php)**  
  *Description:*  
  The remaining CRUD pages continue to function as before, with minor adjustments to support the new attachment field where applicable.  
  *Why:*  
  Maintaining consistency across the CRUD operations ensures that all modifications to movie data, including updates and deletions, are handled reliably, thereby enhancing data management.

**2. Batch Data Entry Optimization (Proposed Approach)**

* **Batch Insert Method for Movies (batchInsertMovies Function in functions.php)**  
  *Description:*  
  I implemented a batch insert function that accepts an array of movie records and inserts them into the database within a single transaction. Although this method is not directly integrated into the website’s user interface, it is a proposed optimization for scenarios where 200 or more movie records need to be added at once.  
  *Why:*  
  Using a batch insert approach with a prepared statement reused within a loop significantly reduces the overhead compared to inserting each record individually. This method is more efficient and ensures data consistency, making it ideal for handling large volumes of data.

**3. Authentication and Security Enhancements**

* **Admin Dashboard Login Integration (admin/dashboard.php)**  
  *Description:*  
  The dashboard page now doubles as the login page for administrators. Users must enter the correct credentials (username: “adm”, password: “12345”) to access the private administrative pages. Once authenticated, session variables are set, and the full admin interface is displayed.  
  *Why:*  
  Integrating authentication directly into the dashboard protects the administrative functions from unauthorized access. This improves security by ensuring that only authorized users can manage the site’s content.
* **Logout Functionality (admin/logout.php)**  
  *Description:*  
  I added a logout page that properly terminates the session and redirects users to the login page.  
  *Why:*  
  This ensures that once an administrator finishes their session, all sensitive session data is cleared, thereby maintaining the security of the administrative area.
* **Session Checks on Private Pages**  
  *Description:*  
  Each administrative page now begins with a session check to verify that the user is logged in. If not, the user is redirected to the dashboard (login) page.  
  *Why:*  
  This consistent approach across all private pages helps prevent unauthorized access and reinforces the overall security of the website.

**4. Data Flow and Functionality Overview**

* **Data Flow Explanation:**  
  Public pages retrieve data from the database via PHP functions (e.g., listMovies(), listCharacters(), etc.) and dynamically render the content. When an administrator adds or updates data through the private pages, the corresponding PHP scripts process the input (including file uploads when applicable) and execute the necessary SQL queries. This data is then immediately available on the public pages, ensuring that the site always displays up-to-date information.
* **Efficiency and Ease of Use:**  
  The modifications—especially the integration of file uploads into the existing forms and the proposed batch insert method—are designed to streamline data entry. These optimizations save time and reduce manual errors, particularly when the volume of records increases to hundreds per section.

**Conclusion**

By implementing these fixes and enhancements, I have improved the overall usability, efficiency, and security of the Star Wars Universe website. The administrative interface now supports file attachments, batch data entry (proposed), and secure login mechanisms, all of which contribute to a more robust and scalable platform. These changes ensure that the site remains easy to maintain and update as the amount of data grows.