

# E-Library

*Notes for self*

Research how to make E library similar to Perlego

Make an initial plan on how to build

Research on how to integrate it

## Perlego

Perlego is a subscription-based E-Library website that allows students across the world to access a wide range of learning material, once a learner has a subscription, they can access any book that is not region locked

## E-Library

- **Objective:** Create an application for students that allows users to view textbooks online

## Key Features to Include:

### 1. User Authentication and Profiles

- So that only students from BGC can have access to the E-library

### 2. Content Management System

- Improve Ui and Ux

### 3. Advanced Search and Filtering

- Help user find what books they are searching for faster

### 4. Reading Interface with Annotations

- Increases user friendliness and Improves readability

### 5. Offline Access

- Using encrypted pdfs or other method to prevent user from pirating pdfs

## 6. Analytics and Reporting

- To find useful metrics such as most popular categories

# Setup Plan

## 1. User Authentication and Profiles

- **Plugins:** Member Press, Restrict Content Pro, or Paid Memberships Pro.
- **Features:** Control access to content. Implement email cross-referencing with BGC's student database for verification.
- **Database Integration:** Use *phpMyAdmin* to manage the database and verify users.

## 2. Content Management System

- **Platform:** WordPress.
- **UI/UX:** Use a theme with the BGC colors
- **Plugins:**
  - **Digital Downloads:** Easy Digital Downloads (EDD) or WooCommerce for managing textbooks.
  - **Security:** JavaScript to disable right-click and other methods to prevent unauthorized downloads.

## 3. Advanced Search and Filtering

- **Plugins:** Relevanssi, SearchWP, Ajax Search Pro.
- **Features:** Implement filters for subjects, authors, and publication dates. Optimize search functionality for speed and accuracy.

## 4. Reading Interface with Annotations

- **Plugins:** PDF Embedder, DearFlip 3D Flipbook, FlowPaper.
- **Features:** Ensures in-browser reading with capabilities for annotations and highlighting.

## 5. Offline Access

- **Methods:** Use encrypted PDFs or similar technologies to ensure offline access while preventing piracy.

- **Security:** Implement measures to ensure that downloaded content cannot be easily copied or shared.

## 6. Analytics and Reporting

- **Tools:** Google Analytics, MonsterInsights, or Jetpack.
- **Features:** Track user engagement, book popularity, and other metrics.

# Hosting

- **Options:** Attach the E-library to an existing BGC website or create a new domain.
- **Considerations:** Ensure compatibility and minimal impact on existing systems.

## Detailed Implementation Steps

### 1. User Authentication and Profiles

- Integrate the chosen membership plugin.
- Connect to the BGC student database using phpMyAdmin for user verification

### 2. Content Management

- Set up EDD or WooCommerce for managing digital textbooks.
- Implement security measures to prevent unauthorized downloads

### 3. Reading Interface

- Install and configure the reading interface plugin.
- Customize the reading interface for annotations and highlighting

### 4. Search and Filtering

- Install and configure the search and filtering plugins.
- Optimize search functionalities and ensure they meet user needs

### 5. Offline Access

- Implement encrypted PDFs and other secure methods for offline access.
- Test to ensure usability and security

### 6. Analytics and Reporting

- Install analytics plugins.

- Set up dashboards to monitor and report user activity

## 7. UI/UX Enhancements

- Customize the WordPress theme for improved user experience.
- Conduct user testing to gather feedback and make necessary adjustments.

# phpMyAdmin

It is a free and open-source web-based database management tool designed to handle the administration of MySQL and MariaDB databases.

Its primary features are

- **Database Management**
  - **Create, Modify, and Drop Databases:** Easily create new databases, modify existing ones, or delete them entirely
- **Table Management**
  - **Create, Modify, and Drop Tables:** Manage the structure of your tables, including creating new tables, altering existing tables, and deleting tables.
  - **Insert, Edit, and Delete Records:** Perform CRUD (Create, Read, Update, Delete) operations on table records
- **SQL Query Execution**
  - **Execute SQL Queries:** Write and execute custom SQL queries directly from the interface.
  - **Query Builder:** Use the visual query builder to create complex queries without needing to write SQL code manually
- **User Management**
  - **Manage Users and Permissions:** Add, edit, and delete database users, and manage their permissions and roles
- **Data Export and Import**
  - **Export Data:** Export database tables or entire databases to various formats, including SQL, CSV, and XML.

- **Import Data:** Import data from SQL files, CSV files, and other formats to your database
- **Backup and Restore**
  - **Database Backup:** Create backups of your databases to ensure data safety.
  - **Restore from Backup:** Restore databases from backup files when needed
- **Data Visualization**
  - **Charts and Graphs:** Visualize data with charts and graphs for better analysis and understanding
- **Plugins and Extensions**
  - **Extend Functionality:** Use plugins and extensions to add more features and customize the tool according to your needs

***\*Please note that we may have to upload a csv file containing the email addresses of our students in order to efficiently make use of User Verification***

## How phpMyAdmin will be useful to us

- **User Verification:** Use phpMyAdmin to manage the database of registered BGC students, enabling user verification for accessing the E-library
- **Database Management:** Easily create and manage databases that store information about books, users, and transactions
- **Data Import/Export:** Import initial data sets (e.g., lists of textbooks) and export data for reporting and analysis

## Conclusion

Developing a BGC-specific E-library like Perlego involves integrating essential features like user authentication, content management, advanced search, and a reading interface with annotations, offline access, and analytics. Utilizing WordPress and its plugins ensures a seamless user experience.

phpMyAdmin is crucial for managing the student database, enabling user verification, and handling information about books and transactions. Its robust database management capabilities support efficient and secure E-library operations, ensuring a valuable resource for BGC students.