Asset Management System for

Central Mindanao University Supreme Student Council

**Prepared by:**  
Cervantes, Aaron Clyde C.

Endrina, Christian Q.

Menguez, Earl Vinent N.

BSIT-2A

Submitted to:

Nacua, Enrico L.

May 2025

**Project Description:**

The Asset Management System is designed to help the Central Mindanao University Supreme Student Council effectively track and manage their assets. It addresses challenges such as equipment misplacement, difficulty in monitoring borrowed items, and lack of centralized inventory records. This system will enable users to record equipment, monitor borrowing and returning of assets, and receive notifications regarding overdue items.

The application hopes to improve asset management by providing a structured, automated, and reliable method for tracking organizational properties and ensuring accountability among users.

**Configuration:**

* Development Tools: Visual Studio and Navicat
* Programming Language: Html, CSS, JavaScript and PHP
* Database: MySQL

**Basic General Flow:**

User logs in → View Assets → Borrow Asset → Asset Status Updates → Return Asset → System notifies overdue assets → Admin manages inventory

**2. Core Functionalities**

**A. User Authentication and Role Management**

* **Login System**
  + Role-based login: Admin, and member
  + Login credentials secured with plain-text passwords.
* **Session Management**
  + Timeout session after inactivity
  + Prevent access to restricted pages if not logged in
* **User Registration**
  + Admin registers new users with role selection
  + Input validation and duplicate-checking

**B. Dashboard & Role-Based Navigation**

* **Admin Dashboard**
  + Overview of system activity (total assets, borrowed, overdue, fines)
  + Buttons to manage users, view logs, and generate reports
* **Member Dashboard**
  + List of currently available assets
  + Personal transaction history
  + Notification panel for due and overdue items

**C. Asset Management**

* **Add/Edit/Delete Assets**
  + Admin can add new assets: name, category, serial code, quantity, condition, image, and location
  + Admin can edit asset details or remove from active inventory
* **Asset Status Tracking**
  + Every asset has a live status: *Available*, *Borrowed*, *Reserved*, *Damaged*, or *Lost*
  + Quantity is auto-updated on every transaction

**D. Borrowing Module**

* **Submit Borrow Request**
  + Members fill out a request form: asset name, reason, borrow date, expected return date
  + System checks availability before submission
* **Approval Workflow**
  + Admin receives borrow requests and can Approve/Deny with remarks
  + Once approved, the asset status changes to “Borrowed”
* **Borrow Receipts**
  + A borrow slip/receipt is generated with user details and asset condition at release

**E. Return Module**

* **Return Form**
  + Borrower returns item and submits a return form
  + Staff/admin confirms item condition and updates system
* **Auto Status Update**
  + If returned in good condition: status set to *Available*
  + If damaged: status set to *Damaged*, fines may apply
* **Late Return Handling**
  + Automatically flags overdue returns and calculates fine based on number of delayed days

**F. Reservation System**

* **Advance Booking**
  + Members can reserve assets for future use
  + Reserved items become “unavailable” to others for that duration
* **Reservation Approval**
  + Admin reviews and confirms reservations
* **Conflict Resolution**
  + Prevents duplicate booking and notifies users if schedule overlaps

**G. Notification System**

* **Automated Email or In-App Alerts**
  + Borrow request approvals/denials
  + Due date reminders
  + Overdue item alerts
  + Reservation confirmations
* **Dashboard Notifications**
  + Users are notified of pending actions or fines on login

**H. Fine and Damage Reporting**

* **Fine Management**
  + Admin can define fine rate (e.g., PHP 20/day for late return)
  + Auto-calculation of total penalties based on duration
* **Damage Reporting**
  + Admin can tag assets as *Damaged* or *Lost*
  + Logs the condition, amount to be paid, and remarks
* **Payment Tracking**
  + Option to mark penalties as paid with receipt upload

**I. Activity Logs and Reports**

* **Transaction Logs**
  + Logs all system actions: borrow/return/reserve/fine/update/delete
  + Filter by date, user, or asset
* **Exportable Reports**
  + Monthly and yearly reports for:
    - Total borrowed assets
    - Outstanding fines
    - Asset usage frequency
* **Audit Trail**
  + Track changes made by admin or staff (e.g., who edited asset records)

**System Architecture Overview:**

|  |  |  |
| --- | --- | --- |
| **Layer** | **Stack / Tools** | **Notes** |
| UI | HTML5, CSS, JavaScript | Web pages for user interaction |
| Application Logic | PHP | Event handling, form validation |
| Data Layer | MySQL | Storage of user and asset data |

**PHP File Data Dictionary**

**Asset Management System for CMU Supreme Student Council**

|  |  |  |
| --- | --- | --- |
| **Filename** | **Purpose / Description** | **Key Functions / Features** |
| **index.php** | Main entry/login page for the system | Displays login form, handles login requests, redirects users based on role |
| **logout.php** | Logs out the user | Destroys session, redirects to login page |
| **register.php** | User registration form (for admin to add new users) | Form to create new users, validate input, insert into users table |
| **dashboard\_admin.php** | Admin dashboard | Overview of assets, borrow requests, fines; links to user management, logs, reports |
| **dashboard\_member.php** | Member dashboard | Shows available assets, personal borrow history, notifications |
| **dashboard\_staff.php** | Staff dashboard (if separate from admin) | Manage asset returns, approve borrow requests, update asset condition |
| **assets\_add.php** | Form and logic to add a new asset | Upload image, validate inputs, insert into assets table |
| **assets\_edit.php** | Edit asset details | Load asset data, update fields, handle edits |
| **assets\_delete.php** | Delete an asset | Confirm and remove asset from database |
| **borrow\_request.php** | Form for members to submit borrow requests | Check asset availability, insert request into borrow\_requests table |
| **borrow\_approval.php** | Admin page to approve/deny borrow requests | List pending requests, update status on approval/denial |
| **return\_asset.php** | Form/page to process asset returns | Confirm condition, update asset status, log return |
| **reservation.php** | Form/page for members to reserve assets | Submit reservation request, check conflicts, insert into reservations table |
| **reservation\_approval.php** | Admin page to review and approve reservations | Manage reservation statuses |
| **notifications.php** | Show user notifications (due dates, approvals, fines) | Fetch and display notifications from database |
| **fines.php** | Admin management of fines | View unpaid fines, mark fines as paid, upload payment receipts |
| **logs.php** | View activity logs | Display audit trail of user/system actions |
| **profile.php** | User profile page | View/update own profile information |
| **config.php** | Central configuration file | Database connection, global constants, session settings |
| **functions.php** | Common functions | Helper functions for validation, queries, notifications |
| **header.php** | Common page header included in all pages | Navigation menu, user info, CSS/JS includes |
| **footer.php** | Common page footer included in all pages | Closing tags, footer info |