

GCLH Linguistics Academy Asset In-Out Management System & Document Stamping Approval Application

Case Providing Department: GCLH Professional Services

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1. Background

GCLH' s daily operations involve a large volume of asset borrowing and cultural product distribution, necessitating a convenient, efficient, and data-accurate in-out management system. The system was designed to enable users to complete in-out operations within 2 – 3 steps upon entering the interface. Inventory quantities are updated in real time, and the status of each asset changes automatically according to “Borrowed/Returned/Damaged,” directly affecting inventory statistics and ensuring backend data accuracy and reliability.

GCLH' s proprietary asset tags allow the system to use existing barcode scanners to scan asset codes without manual retrieval, significantly improving operational efficiency.

The original system was developed on Mingdao Cloud but faced issues such as inventory mismatches, duplicate forms, and functionality failures

caused by user-modified workflows. With Mingdao Cloud being phased out, Ruoxuan Zhang rebuilt the entire platform on Jiandao Cloud. By optimizing logic and expanding functionality, the new system achieved 100% data accuracy, smoother workflows, and significantly reduced user operation steps. User feedback has been positive.

In the current academic year, the college introduced a new “Document Stamping Approval” requirement, mainly targeting EAs and Deans (approvers). From a user experience perspective, Ruoxuan Zhang preset all fields originally requiring manual input using logical formulas, allowing both application and approval processes to be completed in a few steps, substantially shortening the overall workflow. The application has been running stably since launch with positive feedback.

2. Solutions

2.1 Main Interface

Configured as buttons per user requirements, allowing direct access to various forms.

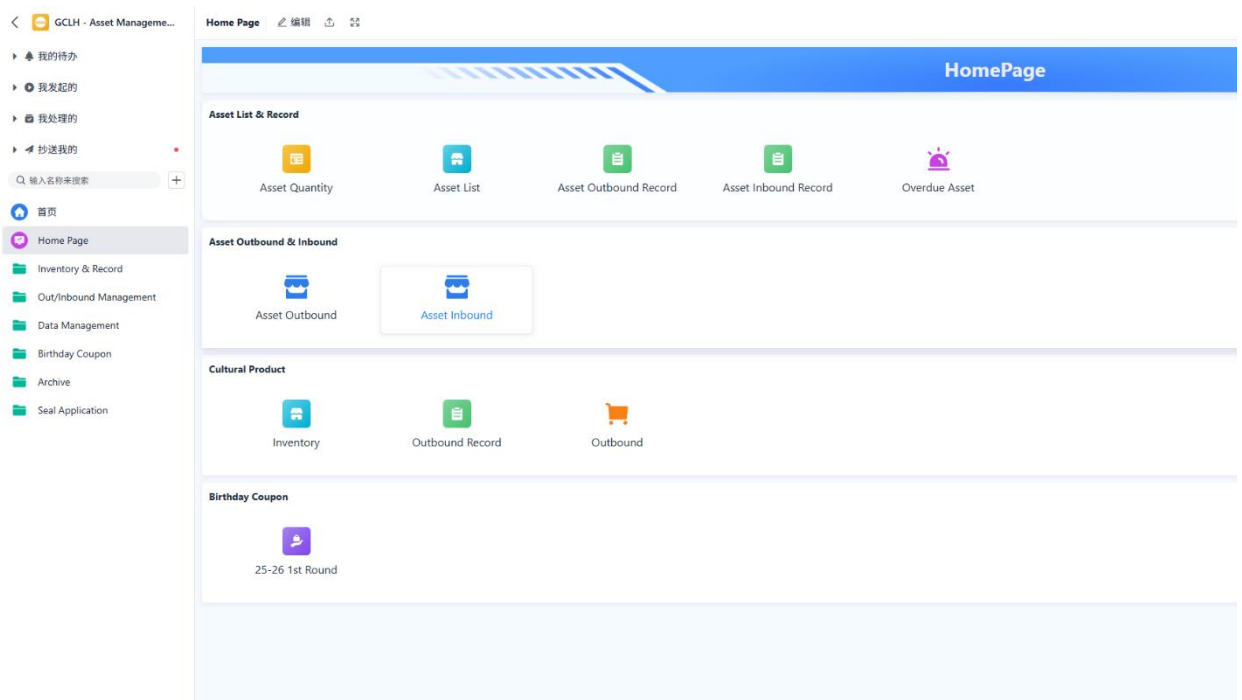


Figure 57 Asset Management Homepage

2.2 Inbound Form

Users only need to select the asset and returner to submit:

- Upon submission, the asset status automatically updates to **In stock**;
- Selecting a returner automatically displays all their unreturned assets for easy verification;
- Users can view real-time inventory of the asset type (in-stock quantity, borrowed quantity, etc.);
- All data updates in real time with operations to ensure consistency;
- Supports direct scanning of asset tags via barcode scanner, eliminating manual lookup.

2.3 Outbound Form

The process is similar to the inbound form, requiring only asset and borrower selection:

- Upon submission, asset status automatically updates to **Borrowed**;
- The system automatically displays all unreturned assets under the borrower;
- Users can view inventory dynamics of the selected assets (remaining quantity, borrowed quantity, etc.);
- Supports barcode scanning for faster outbound processing.

2.4 Real-Time Data Updates

As shown in the figures, the database records the products themselves and corresponding in-out statuses, inventory, and other information, all of which update in real time with operations.

2.5 Culture Product Distribution

For items such as notebooks, pens, A4 paper, etc., functionality is illustrated in the figures.

2.6 Culture Product Data Source

Each product has an image, inventory count, and approval requirement flag. If a product is set to require approval, the submitted application flows to the designated approver.

2.7 Visualized Dashboards

- **Asset Quantity Details & Inventory Replenishment Alerts:** Details shown in figures.
- **Asset Quick Search with Filtering:** As illustrated.
- **Weekly Outbound Statistics and Details (customizable timeframe):** Logic similar to inbound form; only outbound display is shown.
- **Overdue Assets Chart:** Tracks assets with borrow durations, e.g., laptops, enabling users to identify which assets need to be returned in a given week.
- **Culture Product Detail Query Table**
- **Culture Product Outbound Record Query**

2.8 Automated Document Stamping Workflow

The original stamping process relied on sequential emails and offline communication, which was time-consuming and prone to omissions or delays. The new application enables full online workflow:

- Applicants fill in forms online;
- The system automatically sends submission confirmation via GCLH public email (Outlook);
- Workflow routes sequentially to EA → Dean;
- Each approver has an independent interface and perspective;

- Upon approval or rejection, the system automatically sends feedback emails;
- CCs School Manager & applicant to ensure transparency and traceability.

This process significantly reduces manual communication costs, accelerates approvals, and establishes a complete audit trail.

2.9 Back-End Functionality

Supports real-time data, status changes, and other functional details (as illustrated). Additional front-end rules and event settings exist but are omitted here for brevity.

3.0 Outcomes and Benefits

The most direct outcome is a dedicated asset management system for GCLH, enabling faculty to complete borrowing and returning processes with minimal operations while ensuring complete traceable records, including automatic identification of overdue assets, supporting efficient management of teaching equipment.

The stamping approval application significantly reduces back-and-forth emails and communication costs, transforming the original offline

process into a fast online workflow. GCLH public email automates notifications, making approval results clear, timely, and automated, with no manual follow-up required.

3.1 Replicability and Promotion Value

Most colleges have asset management and inventory needs, making this system highly replicable. For departments requiring clear records, real-time statistics, and fast borrowing/returning, the system provides substantial benefits.

The stamping approval workflow can also be extended to other scenarios. Its core is **approval + automated email notifications**. Colleges needing student registration, activity applications, document submissions, etc., can customize fields based on this template to quickly establish automated processes, with administrative public email automatically sending results.

3. Next Steps

The system currently includes an “Overdue Asset Statistics” function to track overdue items. Planned next steps:

- **Automated Reminder Emails:**

- When an asset is approaching its return deadline, the system automatically sends reminder emails from the designated GCLH public email to the borrower;
- If overdue, an automatic “return reminder” is triggered. This automated reminder mechanism will further enhance asset management efficiency and reduce manual follow-up costs.
- Further optimization of approval flow SLAs and visual dashboards.