

User Manual: Equipment Checkout System Usage

This guide details the core functionalities and system rules for both students and administrative staff.

I. Student Perspective (End-User)

The student interface focuses on browsing inventory, checking out equipment, and managing active loans.

Authentication and Access

- Login: Access requires an Email, Password, and a 6-digit Two-Factor Authentication (2FA) Code.
- System Rule: You must have a record in the system to initiate a checkout. The system will only perform transactions for existing users.

Core Actions

Action	Steps & Location	System Rules
Browsing Inventory	Click the "Browse Equipment" tab.	View all devices, their details, and their current Status Indicator (Green Available or Red Unavailable).
Checking Out Equipment	Go to the "Checkout" tab, select an item from the dropdown.	The item must be Green Available. Once checked out, the device status instantly updates to Red Unavailable for all users.
Viewing My Loans	Click the "My Items" tab.	See a list of all equipment currently signed out under your name, along with checkout dates and expected return dates.
Returning Equipment	Navigate to the "My Items" tab and find the item to return.	Click the "Return" button. The transaction is closed, and the device status returns to Green Available.

Transaction Integrity Rules

- Rule 1: Availability Check: You cannot check out any equipment currently marked as Unavailable (**Red**).
 - Rule 2: Unique Loan: You may only check out equipment that is not already associated with another active transaction.
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II. Administrative Perspective (Staff/Superuser)

Administrative management is currently performed via direct database access and phpMyAdmin as the system lacks a dedicated admin dashboard interface.

Access and Credentials

- Login: Requires administrative credentials (provided during the installation guide).
- Access Level: Access via phpMyAdmin grants full authority to modify, delete, and create student, device, and transaction records.

Core Management Actions (via phpMyAdmin)

Since there is no internal administrative interface, all core management is performed directly on the database tables:

Action	Database Table Affected	Purpose
Student Management	student	Managing credentials, creating new staff users, or blocking accounts (if a status column is implemented).
Device Inventory	devices	Adding new equipment, retiring old equipment, and editing device details (e.g., location, description).
Auditing Transactions	transactions	Reviewing all past and current loan history to audit usage, identify overdue items, or resolve disputes.

System Data Reporting

- Reporting: The system currently lacks a visible, generated report function. All administrative data analysis (e.g., calculating utilization rates or total loans) must be done by running manual SQL queries against the transactions and devices tables in phpMyAdmin.