# 🍴 KUBE User Manual: Kitchen Utensil Borrowing Engine

This manual provides instructions for using the **KUBE (Kitchen Utensil Borrowing Engine)** application, a Python Tkinter program designed to manage kitchen utensil inventory, track borrowings, and monitor borrower history.

## I. Getting Started and Logging In

### A. Trial Status

The application operates on a **30-day trial period**. The remaining days are displayed on the login screen.

### B. Admin Login

1. **Launch KUBE.** The main login screen will appear.
2. Enter the **Username** and **Password** for the administrator account.
   * *(Default Credentials: Username: admin, Password: admin123)*
3. Click the **Login** button to access the Main Dashboard.

### C. Header Actions

| **Action** | **Description** |
| --- | --- |
| **Logout 🔒** | Returns you to the Admin Login screen. |
| **Change Password 🔑** | Opens a dialog to securely update the admin password. |

## II. Sidebar Navigation Menu

Use the sidebar menu on the left to navigate between the main application modules:

| **Menu Item** | **Purpose** |
| --- | --- |
| **📊 Dashboard** | Provides a quick summary of currently borrowed and overdue items. |
| **📋 Utensil Inventory** | Displays current stock levels (Total, Available, Borrowed). |
| **📤 Borrow Utensils** | Processes new loans to borrowers. |
| **📥 Return Utensils** | Processes returns, updates inventory, and adjusts borrower scores. |
| **👥 Borrowers** | Lists all registered borrowers and their current **Credit Score** and loan statistics. |
| **📜 Transaction Log** | The complete history of all borrowing and return events. |
| **🔍 Search Borrowings** | Allows filtering of transactions by name and status. |
| **⚙️ Manage Equipment** | Used to add, edit, or delete utensils from the inventory. |
| **⚙️ System Settings** | Adjusts global settings (e.g., maximum borrow limit). |

## III. Inventory Management

### A. Utensil Inventory (View Only)

This page is a dashboard view showing the live status of all equipment:

* **Total:** The total quantity of an item owned.
* **Available:** The current stock ready to be borrowed.
* **Borrowed:** The quantity currently checked out to users.

### B. Manage Equipment (CRUD Operations)

This section is for modifying the actual list of equipment.

| **Action** | **Steps** | **Notes** |
| --- | --- | --- |
| **➕ Add New Utensil** | 1. Enter **Utensil Name**, **Category**, and **Quantity**. 2. Click **Add**. | Initial Available stock equals the Quantity. |
| **✏️ Edit Utensil** | 1. Select the item. 2. Adjust **Name**, **Category**, or **Total Quantity**. 3. Click **✓ Update**. | Cannot set Total Quantity lower than the currently borrowed amount. |
| **🗑️ Delete Utensil** | 1. Select the item. 2. Click **Delete**. | Cannot delete an item if it has any **active borrowings**. |

## IV. Borrowing and Returning Process

### A. 📤 Borrow Utensils (Processing a Loan)

1. **Borrower Details:** Enter the **Borrower Name** (mandatory), **Phone**, and **Email**.
2. **Due Date:** Set the **Due in (days)** (default is 7 days).
3. **Select Items:** Check the box next to each required item and set the specific **Qty** to be borrowed.
4. **Finalize:** Click **🛒 Process Borrowing**.
   * *The system checks the borrower's* ***Max Borrow Limit*** *(set in Settings) before approving the loan.*

### B. 📥 Return Utensils (Processing a Return)

1. **View Active Loans:** The top section lists all active borrowings (Overdue items are highlighted).
2. **Select Returns:** Check the box next to the item(s) being returned.
3. **Fill Details:** For each selected item, specify the:
   * **Return Qty:** How many units are being returned.
   * **Condition:** Select the condition (Excellent, Good, Fair, Damaged, Lost).
   * **Notes:** Add any relevant notes.
4. **Finalize:** Click **✓ Return Selected Items**.
   * *If the* ***Return Qty*** *is less than the original borrowed quantity, the remaining amount stays active on the loan record.*

## V. Borrower & System Management

### A. 👥 Borrowers

This page lists all borrowers and their current **Credit Score** (0-100), status (Excellent, Fair, or Poor), and active loan count.

#### Credit Score Adjustment Rules:

* **Positive:** On-time returns (**+5 points**), Excellent condition returns (**+2 bonus**), Perfect 10-loan history (**+25 bonus**).
* **Negative:** Late returns (**-10 to -25 points**), Damaged/Lost items (**-50 points**).
* **View Details:** Select a borrower and click **👁️ View Details** to see their full transaction history and contact information.

### B. 📜 Transaction Log

This is a chronological record of every borrowing transaction, including return conditions and notes.

* **Export:** Click **📥 Export to CSV** to save the complete log for external reporting.

### C. 🔍 Search Borrowings

Use the **Search** field (for name or utensil) and the **Status** filter (All, Active, Returned, Overdue) to quickly locate specific records in the transaction history.

### D. ⚙️ System Settings

* **Maximum Borrow Limit per Person:** Use the spinbox to set the maximum total quantity of items any single borrower can have checked out at one time. Click **Save Settings** to apply.