Mini project Abstract

Topic:

Stock Management System For College

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Abstract

A College Stock Management System (CSMS) is a software application used by educational institutions to efficiently manage inventory, track supplies, and monitor the usage of materials, equipment, and other resources needed for day-to-day college operations.

Here are the key features and components typically included in a College Stock Management System:

1. Inventory Management:

- **Add/Remove Items:** Allows staff to add new items to the inventory or remove outdated, damaged, or used-up stock.
- **Stock Levels:** Keeps track of the stock quantity for each item in real-time.
- **Reorder Alerts:** Notifies when stock levels of certain items are running low, prompting a reorder before running out.

2. Categories and Classification:

- Items can be grouped into categories like books, stationery, office supplies, lab equipment, etc.
- Allows for easy retrieval and monitoring of stock levels in specific categories.

3. Barcode or QR Code Scanning:

• Stock Identification: Use barcodes or QR codes for fast entry and tracking of items.

• **Inventory Updates:** Scanning items at the point of entry or exit to automatically update stock levels.

4. User Roles and Permissions:

- **Admin:** Full access to the system to add, modify, or remove stock.
- **Staff/Faculty:** Limited access based on their role (e.g., only able to request stock, not modify or delete).
- **Student Access:** In some cases, students might have a limited view of stock, such as books in the library.

5. Stock Requests and Issuance:

- Request System: Faculty, staff, or departments can place stock requests based on their needs
- Approval Workflow: Requests may require approval from an admin or manager before they are fulfilled.
- **Issuance Tracking:** Tracks who has received the items and when they were issued.

6. Stock Reports:

- **Inventory Reports:** Provides detailed reports of stock levels, usage, and reorder status.
- **Usage Trends:** Helps identify patterns in stock consumption to forecast future needs.
- Audit Trails: A log of all stock movements and updates.

7. Supplier Management:(optional)

- Keeps records of suppliers, including contact details, order history, and pricing information.
- Can track order status and manage relationships with suppliers.

9. Multi-location Support (if applicable):

- If the college has multiple campuses or departments, stock can be tracked across different locations.
- Allows for inter-campus or inter-department transfers.

Technologies Used:

- Backend: Can use a database management system (like MySQL, PostgreSQL, or MongoDB) for data storage.
- **Frontend:** Web-based interfaces developed with frameworks such as React, Angular, or Vue.js.
- **Mobile Apps:** For on-the-go tracking, a mobile application might be developed to interact with the system.