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1. Project Title : Logistics Inventory System

2. High-Level Functionalities :

This website is designed to help organize the inventory for TKUISA (Tamkang University Indonesian Student Association). It will assist in monitoring which items each year's cadres use and which are left unused. Additionally, it will display the status of each item—whether it is broken, missing, or in good condition.

a. Login Page

Security measures to block outsiders from tampering with the organization's information.

b. Inventory Listing

A place for the user to keep track of the inventory. Can add or remove an item name, as well as its description and quantity. An added item can also be edited in case it is used or added.

c. Category function

Users can add a custom tag to an item. This tag can be added to other items to group them.

d. Picture Description

Users can upload a picture to give a better description of the item.

e. Search function

A function for users to search for a specific item.

f. Expiration Date Function

A feature to keep track of items that have an expiration date, and remind the user prior to its upcoming date.

3. Scenarios 1

- **Describe who the user is**:
  - The person who is in charge of the inventory

- **Describe what the user wants to do**:
  - Efficiently track, organize, and manage all equipment being used or stored, ensuring easy access, accurate inventory control, and streamlined equipment maintenance or allocation.

- **How the request message starts from the user, how it may be processed, and finally how the system responds**:
  - The interaction begins when the user accesses the inventory management website and submits a request—for example, log in to the page with a username and password to add a new item, check equipment status, or update stock levels. The system processes the request by validating the input, interacting with the database to retrieve or modify records, and then returning a response, such as a confirmation message, updated inventory list, or alert if an issue arises (e.g., low stock). This process ensures real-time inventory accuracy and helps the user make informed decisions efficiently.

- **Identify where PHP logic and database operations are likely needed**:
  - User authentication
  - Editing inventory list (view, add, delete)
  - History
  - Low quantity alert

Scenarios 2

- **Describe who the user is**:
  - The user is a department technician responsible for issuing and receiving equipment for team members or project use, and ensuring that items are returned, tracked, and recorded properly.

- **Describe what the user wants to do**:
  - The technician wants to quickly check out equipment to users, record returns, and track borrowing history in a way that's reliable, and efficient, and reduces manual paperwork. They also want to see who has what item and when it's due to be returned.

- **How the request message starts from the user, how it may be processed, and finally how the system responds**:
  - The technician logs into the inventory management website using secure credentials and selects a function—such as issuing an item to a user. They

fill in the equipment ID, the borrower's name, and the expected return date. PHP scripts process the request, validate the data, and record the transaction in the database. The system then updates the inventory status, logs the transaction in a history table, and displays a success message along with the updated list of currently issued items. If an item is already checked out or unavailable, the system returns a warning.

- **Identify where PHP logic and database operations are likely needed**:
  - User Authentication
  - Issuing Equipment
  - Returning Equipment
  - Borrowing History
  - Availability Check