

Programming Assignment

Design and implement the frontend and backend for a basic inventory management application.

Context:

1. There are 2 roles: Department Manager, Store Manager
2. A user record consists of username, password and email
3. One user can map to multiple roles and vice versa
4. An inventory record consists of the following details: Product Id, Product Name, Vendor, MRP, Batch Num, Batch Date, Quantity (Stock on Hand) and Status (Approved/Pending)
5. A user mapped as Department Manager needs the approval of Store Manager for adding/changing/removing inventory record
6. A user mapped as Store Manager can:
 - a. Add/change/remove inventory record without any approval (auto-approved)
 - b. Fetch the list of all inventory items pending for approval and approve them

Frontend:

Design and implement the frontend (UI) with the following user options:

- a. Login with username and password
- b. Add inventory
- c. Fetch inventory items and approve

Backend:

Design and implement the backend application which provides the following REST API endpoints to be consumed by the frontend.

- a. **login** – User login API
- b. **inventory** – API to manage inventory record(s) with following features
 - a. Add inventory record(s)
 - b. Fetch inventory record(s)
 - c. Approve inventory record(s)

The APIs should send/receive data in JSON format, and should return appropriate details in case of successful execution (or) an error message in case of any errors.

Instructions

You are free to:

1. Use your preferred programming language / web framework to build the module.
2. Refer to any website for help. No restrictions.
3. Ask for any clarification / assistance during the assignment.

Once completed, please post your code on Github and share the link for evaluation.