Inventory Management System

Overview

The Inventory Management System is a web-based application developed using Laravel 11 and PostgreSQL. It provides a comprehensive solution for managing inventory in a small business environment. This system includes features like user authentication, inventory item management, inventory tracking, role-based access control, data import/export functionality, and dynamic filtering with AJAX.

Features

- User Authentication: Secure login and registration system.
- Role-Based Access Control: Permissions based on user roles.
- Inventory Management: Add, edit, and delete inventory items.
- Inventory Tracking: Track stock levels, including warnings for low stock.
- Dynamic Filtering: AJAX-based search and filtering for inventory items.
- Data Import/Export: Import and export inventory data in CSV and Excel formats.
- Fixed Table Header: Implemented for easier data viewing while scrolling.
- Logs: Process logging to track activities within the system.
- PDF Export: Export sales bills and other documents in PDF format with dynamic file names.
- Stock Alert: Alerts users when entered quantities exceed available stock.

Future Enhancements

- Quotation management
- Sale bill PDF generation
- Purchase and sale editing functionality

Technology Stack

- Backend: Laravel 11, PostgreSQL
- Frontend: Blade Templating Engine, JavaScript, jQuery, AJAX
- Version Control: Git, GitHub
- Environment: Windows, Composer, PSR-4, nWidart package for modular development

Installation

1.Clone the repository:

    git clone https://github.com/pushpaasabari/Inventory-Management-System.git

2.Navigate to the project directory:

    cd Inventory-Management-System

3.Install dependencies:

    composer install
    npm install

4.Set up the environment:

    cp .env.example .env
    php artisan key:generate

5.Configure the .env file with your database and other configurations.

6.Run database migrations:

    php artisan migrate

7.Serve the application:

    php artisan serve