



Inventory Management System

User Manual

EEC 521 – Software Engineering Project

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1. Introduction

Welcome to the **Inventory Management System (IMS)** User Manual. This guide provides a comprehensive overview of the system designed to streamline inventory operations for businesses of all sizes. The IMS is a web-based platform enabling users to efficiently manage products, stock levels, suppliers, and inventory reports.

With its user-friendly interface and robust features, IMS automates critical inventory tasks, reduces human errors, and ensures real-time data accuracy. Key features include:

- Adding, editing, and deleting products.
- Managing stock levels and generating low-stock alerts.
- Categorizing products for better organization.
- Maintaining supplier details for seamless reordering.
- Generating insightful reports for data-driven decision-making.

Whether you're a business administrator or an employee managing inventory, this manual will guide you through installation, system requirements, usage scenarios, and best practices. It is structured to ensure a smooth onboarding experience and efficient usage of the system's features.

2. System Requirements

- **Supported Browsers:** Chrome, Firefox, Safari
- **Operating Systems:** Windows, macOS, Linux
- **Database:** SQLite3
- **Framework:** Django
- **Internet:** Required for real-time updates

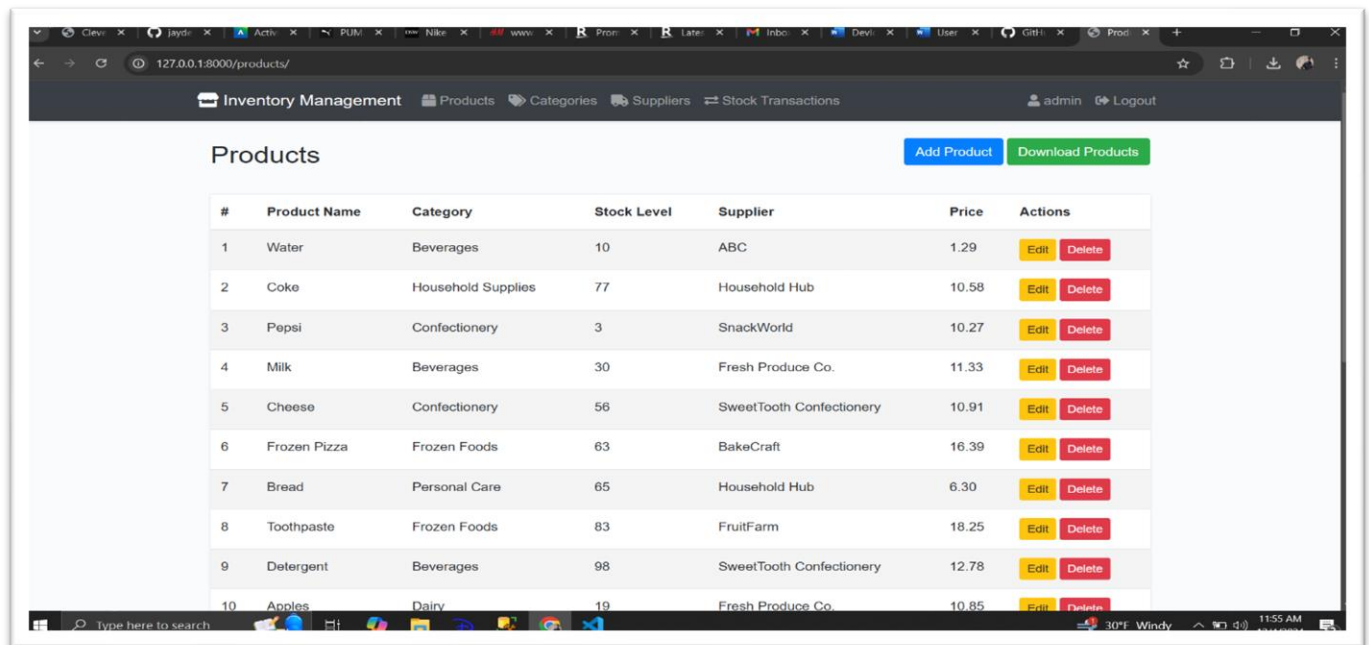
3. Installation

1. Download the IMS installation package.
2. Extract the package and navigate to the installer.
3. Run the `setup.exe` file (Windows) or the corresponding installer for macOS/Linux.
4. Follow the on-screen instructions to complete the installation.
5. Open the IMS application through the browser at `localhost:8000` or the specified deployment URL.

4. Getting Started

4.1 Product Management

- **Adding a Product:**
 - Navigate to the "Product Management" screen.



The screenshot shows a web application titled "Inventory Management". The navigation bar includes links for "Products", "Categories", "Suppliers", and "Stock Transactions". The user is logged in as "admin". The main section is titled "Products" and contains a table with the following data:

#	Product Name	Category	Stock Level	Supplier	Price	Actions
1	Water	Beverages	10	ABC	1.29	Edit Delete
2	Coke	Household Supplies	77	Household Hub	10.58	Edit Delete
3	Pepsi	Confectionery	3	SnackWorld	10.27	Edit Delete
4	Milk	Beverages	30	Fresh Produce Co.	11.33	Edit Delete
5	Cheese	Confectionery	56	SweetTooth Confectionery	10.91	Edit Delete
6	Frozen Pizza	Frozen Foods	63	BakeCraft	16.39	Edit Delete
7	Bread	Personal Care	65	Household Hub	6.30	Edit Delete
8	Toothpaste	Frozen Foods	83	FruitFarm	18.25	Edit Delete
9	Detergent	Beverages	98	SweetTooth Confectionery	12.78	Edit Delete
10	Apples	Dairy	19	Fresh Produce Co.	10.85	Edit Delete

- Click "Add Product" and fill out details like name, category, stock level, supplier, and price.

Inventory Management Products Categories Suppliers Stock Transactions admin Logout

Add Product

Product Name
Coke

Category Beverages

Supplier Swift Beverages

Initial Stock Level
50

Price
2.27

Save Cancel

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- Save the product to update the inventory.

- **Editing/Deleting a Product:**

- Select a product from the list.
- Choose "Edit" or "Delete" as needed.
- Confirm your action to complete the process.

Inventory Management Products Categories Suppliers Stock Transactions admin Logout

Products

Add Product Download Products

#	Product Name	Category	Stock Level	Supplier	Price	Actions
1	Water	Beverages	10	ABC	1.29	Edit Delete
2	Coke	Household Supplies	77	Household Hub	10.58	Edit Delete
3	Pepsi	Confectionery	3	SnackWorld	10.27	Edit Delete
4	Milk	Beverages	30	Fresh Produce Co.	11.33	Edit Delete
5	Cheese	Confectionery	56	SweetTooth Confectionery	10.91	Edit Delete
6	Frozen Pizza	Frozen Foods	63	BakeCraft	16.39	Edit Delete
7	Bread	Personal Care	65	Household Hub	6.30	Edit Delete
8	Toothpaste	Frozen Foods	83	FruitFarm	18.25	Edit Delete
9	Detergent	Beverages	98	SweetTooth Confectionery	12.78	Edit Delete
10	Apples	Dairy	19	Fresh Produce Co.	10.85	Edit Delete

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- **Low Stock Alerts:**

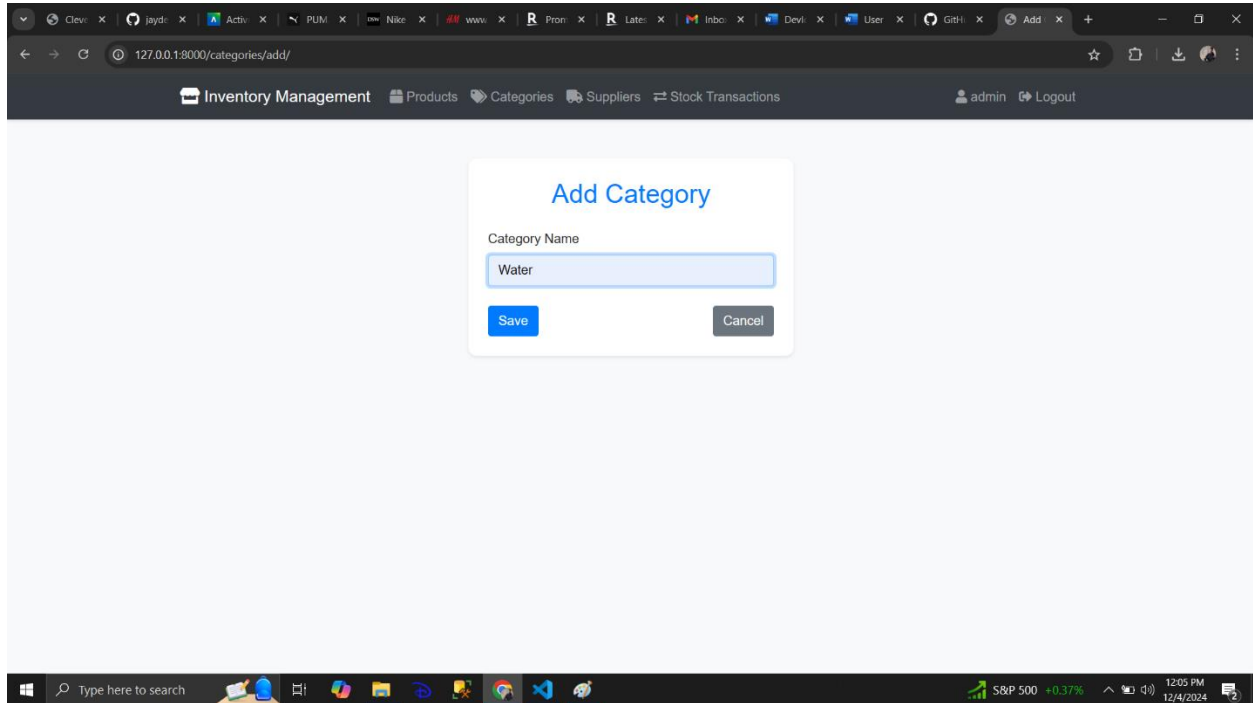
- Alerts will appear on the dashboard for products below the threshold.
- Restock or reorder as necessary.

The screenshot shows a web application titled "Inventory Management" with a navigation bar containing "Products", "Categories", "Suppliers", and "Stock Transactions". The user is logged in as "admin". The dashboard features four summary cards: "Total Products" (21), "Total Categories" (11), "Total Transactions" (6), and "Low Stock Items" (2). The "Low Stock Items" card is circled in red. Below these cards is a table titled "RECENT STOCK TRANSACTIONS" with columns for #, Reference Number, Product, Transaction Type, Quantity, Performed By, and Date. The table lists five transactions, with the last two marked as "Removed". A "View All Transactions" button is located at the bottom left of the table.

#	Reference Number	Product	Transaction Type	Quantity	Performed By	Date
1	RN121D4Q	Tomatoes	Added	17	admin	Dec 04, 2024
2	PV779T3E	Bread	Added	4	kevin	Dec 04, 2024
3	XD705R0M	Toothpaste	Added	3	kevin	Dec 04, 2024
4	LO790P7Z	Chocolates	Removed	22	kevin	Dec 04, 2024
5	GM929B5C	Water	Removed	42	kevin	Dec 04, 2024

4.2 Category Management

- **Add Category:**
 - Open the "Category Management" section.



- Select a product and input the new stock level.
 - Click "Update" to save changes.
- **Editing/Deleting a Category:**
 - Select a product from the list.
 - Choose "Edit" or "Delete" as needed.
 - Confirm your action to complete the process.

Clevi x jaydi x Acti x PUM x Nike x www x R Prom x R Late x Inbo x Devi x User x Githi x Cate x

127.0.0.1:8000/categories/

Inventory Management Products Categories Suppliers Stock Transactions admin Logout

Categories

Add Category

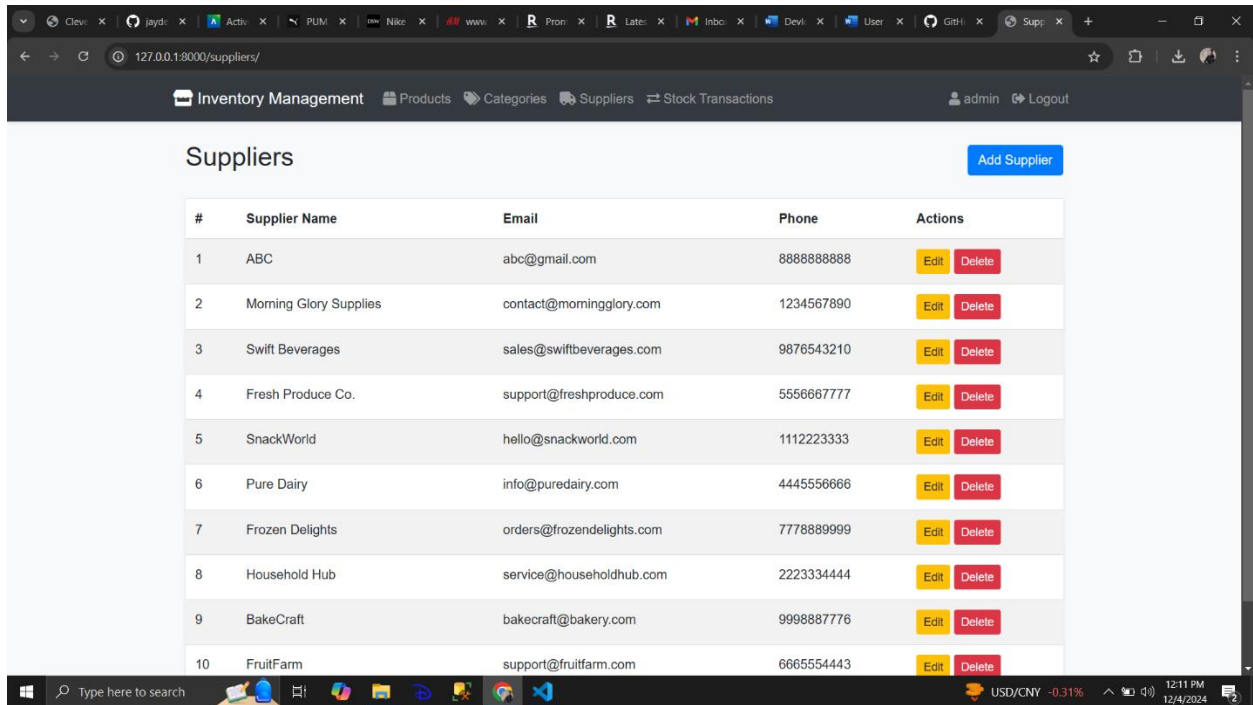
#	Category Name	Actions
1	Beverages	<div>EditDelete</div>
2	Snacks	<div>EditDelete</div>
3	Dairy	<div>EditDelete</div>
4	Frozen Foods	<div>EditDelete</div>
5	Bakery	<div>EditDelete</div>
6	Personal Care	<div>EditDelete</div>
7	Household Supplies	<div>EditDelete</div>
8	Fruits	<div>EditDelete</div>
9	Vegetables	<div>EditDelete</div>
10	Confectionery	<div>EditDelete</div>

Type here to search

Snow coming 12:08 PM 12/4/2024

4.3 Suppliers

- **Adding a Supplier:**
 - Navigate to the "Supplier Management" screen.



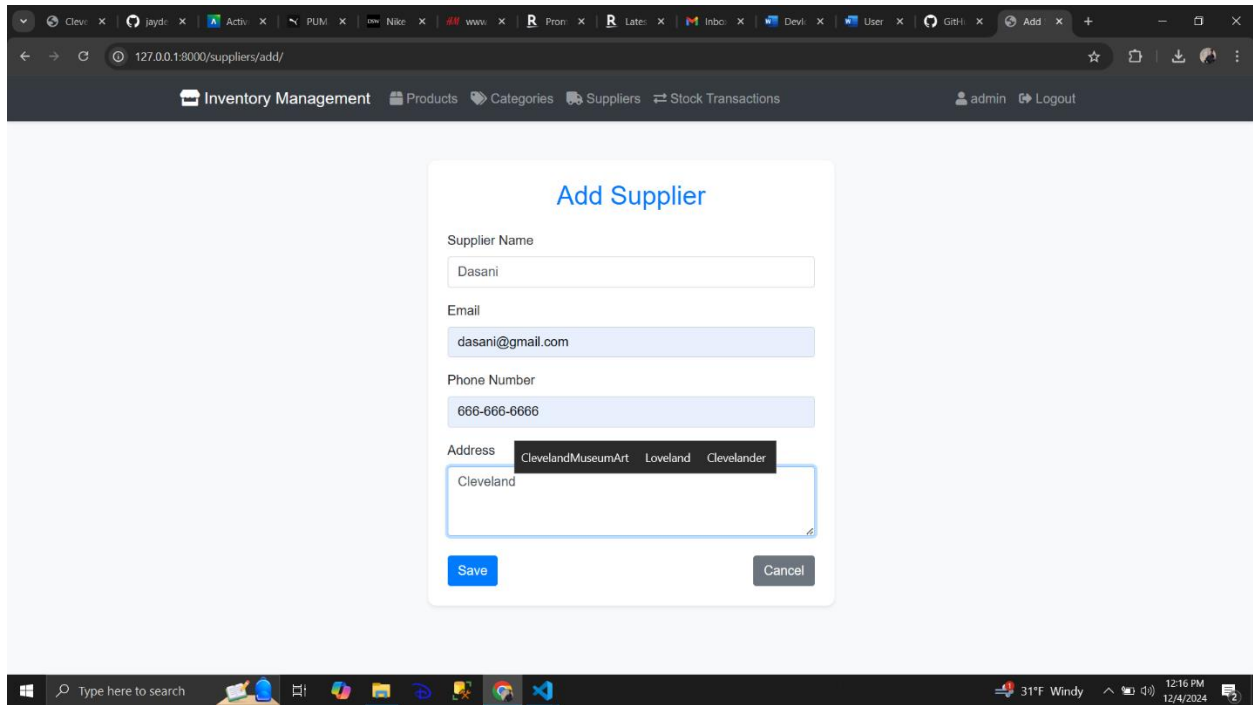
The screenshot displays a web application interface for managing suppliers. The browser address bar shows the URL '127.0.0.1:8000/suppliers/'. The application header includes 'Inventory Management' and navigation links for 'Products', 'Categories', 'Suppliers', and 'Stock Transactions'. The user is logged in as 'admin'.

The main content area is titled 'Suppliers' and features a table with the following data:

#	Supplier Name	Email	Phone	Actions
1	ABC	abc@gmail.com	8888888888	Edit Delete
2	Morning Glory Supplies	contact@morningglory.com	1234567890	Edit Delete
3	Swift Beverages	sales@swiftbeverages.com	9876543210	Edit Delete
4	Fresh Produce Co.	support@freshproduce.com	5556667777	Edit Delete
5	SnackWorld	hello@snackworld.com	1112223333	Edit Delete
6	Pure Dairy	info@puredairy.com	4445556666	Edit Delete
7	Frozen Delights	orders@frozendelights.com	7778889999	Edit Delete
8	Household Hub	service@householdhub.com	2223334444	Edit Delete
9	BakeCraft	bakecraft@bakery.com	9998887776	Edit Delete
10	FruitFarm	support@fruitfarm.com	6665554443	Edit Delete

An 'Add Supplier' button is located in the top right corner of the table area. The Windows taskbar at the bottom shows the system clock as 12:11 PM on 12/4/2024.

- Add a Supplier and fill out details like name, email, phone number and address.



4.3 Report Generation

- **Generating Reports:**
 - Go to the "Stock Transaction" section.
 - Select filters (e.g., date range, category).
 - Click "Generate Report" to view and download results.

Inventory Management Products Categories Suppliers Stock Transactions admin Logout

Stock Transactions

[Add Stock Transaction](#) [Download Transactions](#)

Transaction Type: All Product: All Performed By: All From Date: mm/dd/yyyy To Date: mm/dd/yyyy

[Apply Filters](#) [Reset](#)

#	Reference Number	Product	Transaction Type	Quantity	Performed By	Date	Remarks	Actions
1	RN121D4Q	Tomatoes	Added	17	admin	Dec 04, 2024	Dummy transaction for Tomatoes	Edit Delete
2	PV779T3E	Bread	Added	4	kevin	Dec 04, 2024	Dummy transaction for Bread	Edit Delete
3	XD705R0M	Toothpaste	Added	3	kevin	Dec 04, 2024	Dummy transaction for Toothpaste	Edit Delete
4	LO790P7Z	Chocolates	Removed	22	kevin	Dec 04, 2024	Dummy transaction for Chocolates	Edit Delete
5	GM020B5C	Water	Removed	42	kevin	Dec 04, 2024	Stolen	Edit Delete

- **Viewing Reports:**

- Access saved reports in the "Reports Archive/Download section."
- Use filters to find specific reports.

AutoSave OFF transactions (1).csv • Saved to this PC

File Home Insert Page Layout Formulas Data Review View Automate Help Acrobat

Reference Number

Reference	Product	Transaction	Quantity	Performed	Date	Remarks
1	SZ200P9D Water	Add Stock	50	kevin	*****	Initial stock for Water
2	GM929B54 Water	Remove St	42	kevin	*****	Stolen
3	LO790P7Z Chocolate	Remove St	22	kevin	*****	Dummy transaction for Chocolates
4	XD705R0M Toothpaste	Add Stock	3	kevin	*****	Dummy transaction for Toothpaste
5	PV779T3E Bread	Add Stock	4	kevin	*****	Dummy transaction for Bread
6	RN121D4C Tomatoes	Add Stock	17	admin	*****	Dummy transaction for Tomatoes

transactions (1)

5. Best Practices

- Regularly update stock levels to maintain accurate records.
- Use clear, consistent naming for products and categories.
- Back up the database weekly to prevent data loss.

6. Troubleshooting

- **Common Issues:**
 - **Error: Unable to update stock levels.**
 - Check if the product exists and has valid inputs.
 - **Issue: Email notifications not sent.**
 - Verify email server configuration in the system settings.
- **Steps to Resolve:**
 - Restart the application if issues persist.
 - Contact the support team for unresolved problems.

7. Feedback & Suggestions

- We value your feedback! If you have any suggestions for improving the Inventory Management System or encounter any issues while using the application, please don't hesitate to reach out to us at j.ravaliya@vikes.csuohio.edu or k.panchal60@vikes.csuohio.edu or j.mistry@vikes.csuohio.edu. Your input helps us enhance the functionality and usability of the Inventory Management System for all users.