

Introduction

This system allows users to manage both inventory and supplier data. Users can choose to either manage inventory or suppliers when they start the system. There are also options to log in as either a manager or worker, each with their own set of permissions and features.

Starting the Program

Upon starting, the user is greeted with a menu that allows them to select between **Inventory** management or **Supplier** management.

?Welcome! Would you like to manage Inventory or Supplier

:Type '1' for Inventory or '2' for Supplier

Inventory Management

When Inventory Management is selected, the user is prompted to log in as either a manager or a Worker. Each has different permissions:

Manager has full access to all inventory management functionalities.

Workers have limited access with essential functions like adding or moving items

Manager Menu

Upon registering or logging in as a **Manager**, the following menu is shown:

===== Inventory Management System Menu - Manager menu =====

Apply order .4

Generate Inventory Report (Manager) .5

Add Product (Manager) .6

Set a discount (Manager) .7

Go to Worker Menu (Manager) .8

Exit .9

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Select an option

Key Functions for Manager:

Apply Order: Automatically processes an order for the supplier.

Generate Inventory Report: The manager can generate detailed reports filtered by category, sub-category, about-to-finish products, expired items, etc.

Add Product: Managers can add new products to the inventory by specifying details such as name, category, size, and minimum quantity.

Set Discount: Apply discounts to products, categories, or subcategories within a specific date range.

Access Worker Menu: Switch to the worker menu for further actions.

Exit: Exit the system

Worker Menu

Upon logging in as a **Worker**, the following menu is available:

===== Inventory Management System Menu - Worker menu =====

Add Item (Worker) .1

Remove Item (Worker) .2

Move Item (Worker) .3

View Product Details (Worker) .4

Exit .9

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:Select an option

Key Functions for Worker:

Add item- The worker can add item to existing product that the manager that add the worker will able the add the item for the specific product

Remove Item-The worker can remove item from existing product the manager that add the worker will able the remove the item for the specific product

Move Item- The worker can move sepsifc item form the shop to the warehouse and the upside

View Product Details- The worker can get information about product that he chooses to get the information

Supplier Management

Upon registering or logging in as a Manager(senior), the following menu is shown:

--- Supplier Management System ---

1. Open New Supplier Card

2. Delete Supplier Card

3. Add Product to Supplier

4. Remove Product from Supplier
5. Update Supplier Details
6. Update Products Discount Details
7. Print All Suppliers Cards
8. Print All Orders Reports
9. Open New Constant Order
10. Update Constant Order
11. Print All Active Orders
0. Exit

Please enter your choice:

For a worker(junior) actions number: 2,4,5 will not be available

1. Open New Supplier Card

If you want to add a new supplier to the system, choose this option.

- **Required Input:**
 - Supplier Name
 - Supplier Phone Number (digits only)
 - Supplier Email (in this format: username@something.com)
 - Company ID (digits only)
 - Bank Account (digits only)
 - Payment Method (Credit, Cash, Transfer)
 - Products (name, price, expiration days, weight, discounts, etc.)
- After adding the supplier, their details will be saved, and an agreement will be created to
- manage the products associated with the supplier.

2. Delete Supplier Card (Senior Manager Only)

If you want to delete an existing supplier, choose this option.

- **Required Input:**
 - Supplier ID
 - Confirmation to delete (yes/no)
- This option will remove the supplier and their agreement, along with any associated products.

3. Add Product to Supplier

If you want to add a new product to an existing supplier, select this option.

- **Required Input:**
 - Supplier ID
 - Product Name
 - Product Catalog ID
 - Product Price, Expiration Days, and Weight (digits only)
 - Discounts (optional, you can add multiple discounts) (digits only, discount percent is from 1 to 100)
- This will link the new product to the supplier's agreement.

4. Remove Product from Supplier (Senior Manager Only)

If you need to remove a product from a supplier's list, choose this option.

- **Required Input:**
 - Supplier ID
 - Product Catalog ID

- After selecting the product, it will be removed from the supplier's agreement.

5. Update Supplier Details (Senior Manager Only)

To update the information of an existing supplier, use this option.

- **Required Input:**
 - Supplier ID
 - Choose which field to update:
 1. **Company ID:** Enter a new Company ID (digits only).
 2. **Bank Account:** Enter a new Bank Account (digits only).
 3. **Payment Method:** Choose from Credit, Cash, or Transfer.
 4. **Contact Info:** Enter a new contact name, phone number, or email.
 - **Note:** When selecting "Contact Info", you will be prompted to enter the updated contact details individually, and after the updates, a message confirming the change will appear.
 5. **Supplier Agreement:** Select this option to update the agreement details.
 - You will be brought to a **new menu** where you can:
 - **Update Supply Days:** Enter new days when the supplier will make deliveries (e.g., Monday, Tuesday).
 - **Update Self Supply:** Specify whether the supplier is responsible for delivering products or if the company will pick them up (true/false).
- After making changes, a confirmation message will appear (e.g., "Company ID has been changed to: [new value]").
- Once all updates are completed, the system will print the full updated supplier information.

6. Update Product Discount Details

If you want to add, update, or remove discounts from a product associated with a supplier, choose this option.

- **Required Input:**
 - Supplier ID

- Product Catalog ID
- Choose whether to **add** or **delete** a discount.
 - **Add:** Input the quantity and the discount percentage (between 1% and 100%).
 - **Delete:** Input the quantity for which the discount should be removed.
- After adding or removing a discount, the system will print the updated discount list for the product.

7. Print All Suppliers Cards

This option allows you to print the details of all suppliers in the system, including their associated products and agreements.

- This is useful for reviewing the current state of the supplier information.

8. Print All Orders Reports

If you want to review all the orders currently in the system, choose this option.

- This will print out details for all orders, including the suppliers, products, quantities, and dates associated with each order.

9. Open New Constant Order

If you want to create a recurring (constant) order for products that need to be delivered regularly, choose this option.

• Required Input:

- Product Name(s): Enter the names of the products you want to include in the order.
 - Quantity: For each product, input the required quantity.
 - The system will find the supplier offering the best price for each product, factoring in any applicable discounts.
 - The system will create a constant (periodic) order that is automatically scheduled for regular deliveries based on the supplier's availability.
 - Once the order is created, it will be stored as a recurring order, and the details (supplier, products, quantities, prices) will be saved and printed for review.
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10. Update Constant Order

If you need to modify an existing constant (recurring) order, select this option.

- **Required Input:**

- Order ID: Enter the ID of the order you want to update from the list of active constant orders.
 - Choose one of the following actions:
 1. Turn into Non-Constant Order: This will change the recurring order into a one-time order, meaning no future deliveries will be scheduled.
 2. Update Product List: You can update the products and quantities for the selected order.
 - If you choose to update the product list, the system will allow you to add, remove, or change the quantities of the products in the order.
 - If the order is updated successfully, the system will save the changes and print the updated order details.
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11. Print All Active Orders

This option allows you to print the details of all currently active orders in the system, both constant and one-time orders.

- The system will retrieve all active orders and display their details, including:
 - Supplier information
 - Products ordered
 - Quantities
 - Prices (before and after discount)
 - Order date and delivery date
 - This is useful for monitoring the status of all active orders, providing a comprehensive overview of ongoing deliveries and supplies.
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0. Exit

Select this option when you are finished working with the system to safely exit the program.

General Notes:

- If you input incorrect data, the system will display an error message and prompt you to re-enter the information.
- Always follow the input guidelines for fields like Supplier ID, Company ID, and Product Catalog ID to ensure the system processes the data correctly.
- Ensure you are logged in with the appropriate role to access the full set of system features. For example, only Senior Managers can delete suppliers or products, and update supplier details.

Login Credentials

Senior Manager:

Username: senior

Password: 1111

Junior Manager:

Username: junior

Password: 2222

Additional Notes

Data Integrity: The system ensures data integrity by validating inputs, such as ensuring discount dates are valid and that items belong to the correct product categories.

Real-time Updates: All changes in inventory and supplier data are reflected in real-time, ensuring accurate and up-to-date information.

Error Handling: The system includes error handling for invalid inputs and operations, prompting users to retry when necessary.