

Medical Inventory Management System

Requirements:

This is a medical inventory management system for storing and selling medical products. It has two types of users, manager and employee. Admin has complete access to the products and employees of the system. Usually, the system should store maximum of 5000 or a minimum of 10 packets. Employee has access to the inventory, puts each item to its own category and takes care of order. The system must save data daily for backup purposes.

1-Login:

The system has two types of users as described above: **Manager** and **employee**. Each user has to type in an **email** and **password** to **enter the system**. And this password should be **unique**, it means this system can't allow two or more user have the same password.

Users: Each user can perform **several different actions** with the manager having **more power**.

2-Managers

Managers have certain roles in the system that'll be described in detail below.

Manage products: A manager will have the ability to **add new products** to the system. Also, the manager will be able to **remove items** from the inventory once they're **out of stock** or when they reach their **expiration date**. Lastly, they can also **edit information** about the product in case of a mistake during the addition procedure.

Add product information: Managers also have the responsibility to **enter details** about products such as **name**, **size**, **price**, **quantities** and **descriptions**.

Manage Employee information: The manager also administers information regarding the employee such as **name**, **ID**, **unique password**, **salary** and **address**. Managers will also give each of their employees their own email and unique password to enter the system. They'll also have the ability to **update information** about an employee once there's a change.

Make annual reports: Managers will **create reports** once every year to analyze **data**, **sales**, and **profit**. This report will help the business to make careful and strategic decisions.

3-Employee:

Access information: Employees will have the ability to **access information** about **available** products, but this access to information is **limited** it means employees can't see the **import price**.

Orders: Employees will have the ability to **place orders** for customers, **cancel orders** if necessary, and **update orders** in case of any change from the customer or mistake.

Data entry: After the manager adds products to the system, employees will **classify** (**filter**) each product according to the specific category.

Receive payments: Employees will handle the **payment process** when the orders **go through**. and employees has this ability that can **see the previous sales**.

4-Products:

Product information: Each product should has **ID**, **name**, **category**, **import price**, **export price**, **importing date** and **expire date**.

Non-Functional Requirements:

1-Performance

Response Time: To ensure **efficient user interaction**, the system should **respond** to user requests within a **specified time frame** (e.g., 2 seconds for most operations).

Scalability: The system should be able to **handle** an **increasing** number of products, employees, and **transactions** without **experiencing significant performance degradation**.

Reliability: The system should be available **24 hours a day, seven days a week**, with **minimal downtime**.

2-Security

Data Encryption: To **prevent** **unauthorized access**, sensitive data, including user credentials, should be **encrypted** in transit and at rest.

Access Control: Access to various system functions should be **restricted** based on **user roles**, ensuring that employees only have access to the tasks that have been **assigned to them**.

Audit Trail: For security and compliance purposes, the system should **keep a comprehensive audit trail** that logs all user activities.

3-Usability

User-Friendly Interface: The **user interface** should be **intuitive**, **simple** to navigate, and **provide users** with **clear feedback**.

Accessibility: The system should be **designed** to **accommodate disabled users** while adhering to accessibility standards.

Training and Support: Provide **training materials** and **support** to **assist users** in quickly adjusting to the system.

