

Inventory Management system

INTE 12213- Object Oriented Programming



Prepared By Group 04

Table of Content

Project requirement.....	3
Introduction	3
Instructions to use the software.....	3
Required tools for the development of the system:	10
Project Limitation.....	10
User Interface	10

Project requirement

To develop a small software to handle the inventory of the New Building at Department of Industrial Management.

Introduction

This project is aimed at developing a desktop based application named Inventory Management System for managing the inventory system of the New Building at Department of Industrial Management. The Inventory Management System (IMS) refers to the system and processes to manage the stock of the department with the involvement of Technology system. This system can be used to view the details of the available inventory, enter new items to inventory, update the existing inventory and remove items from the inventory. It is a small window based application which has admin component to manage the inventory and maintenance of the inventory system.

Instructions to use the software

Figure 1 displays the login page which is created in order to protect the management of the inventory of the department in order to prevent it from the threads and misuse of the inventory. As software starts the login page appears. Admin login is determined by the username and password that has all the authority to add, view, update and remove the items in the inventory as per the requirement. By entering username as “ **admin@gmail.com** ” and the password as “**admin1** ”, admin can log in to the system. In here we also provide options to clear user name and password if when they make mistakes when typing those things and also if admin forgot the password there is an option to make new password to the system. In addition, there is an exit option too, when admin want to quit the software.

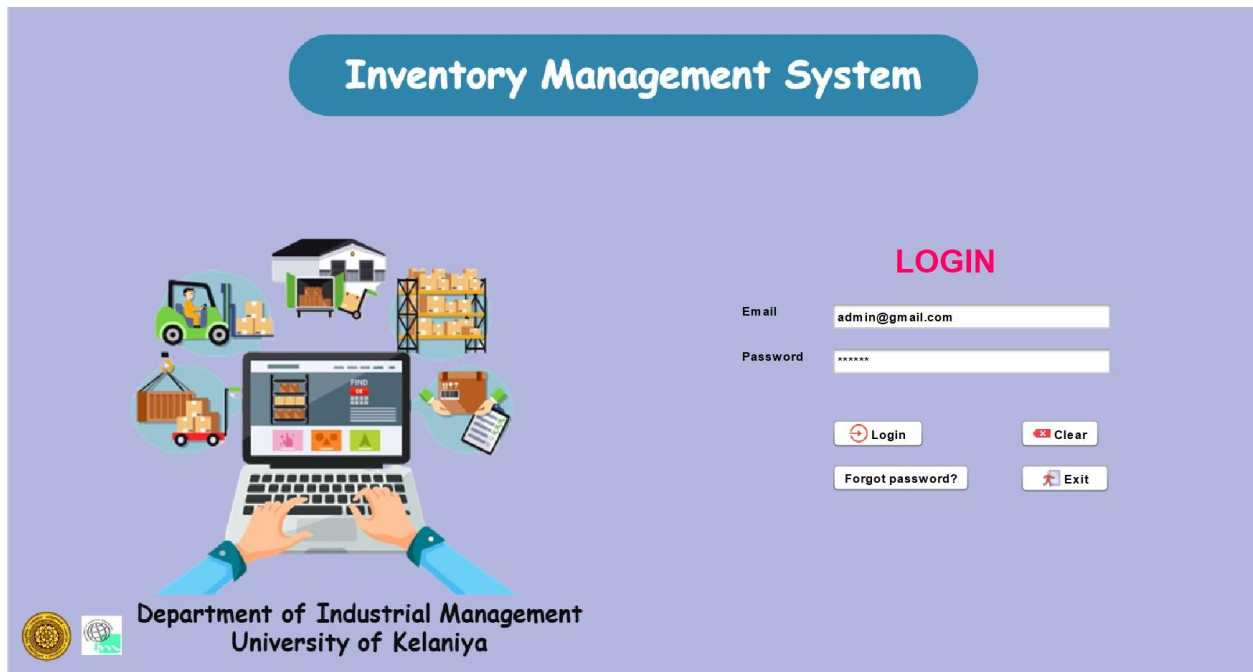


Figure 1

After the log into the system, figure 2 displays the home page which provide facilities to view the items, enter new items to the inventory, update the existing items, enter new category to the database and remove unwanted items from the inventory.



Figure 2

When admin click on the “Manage Category” button it will lead to Add category page as shown in Figure 3.

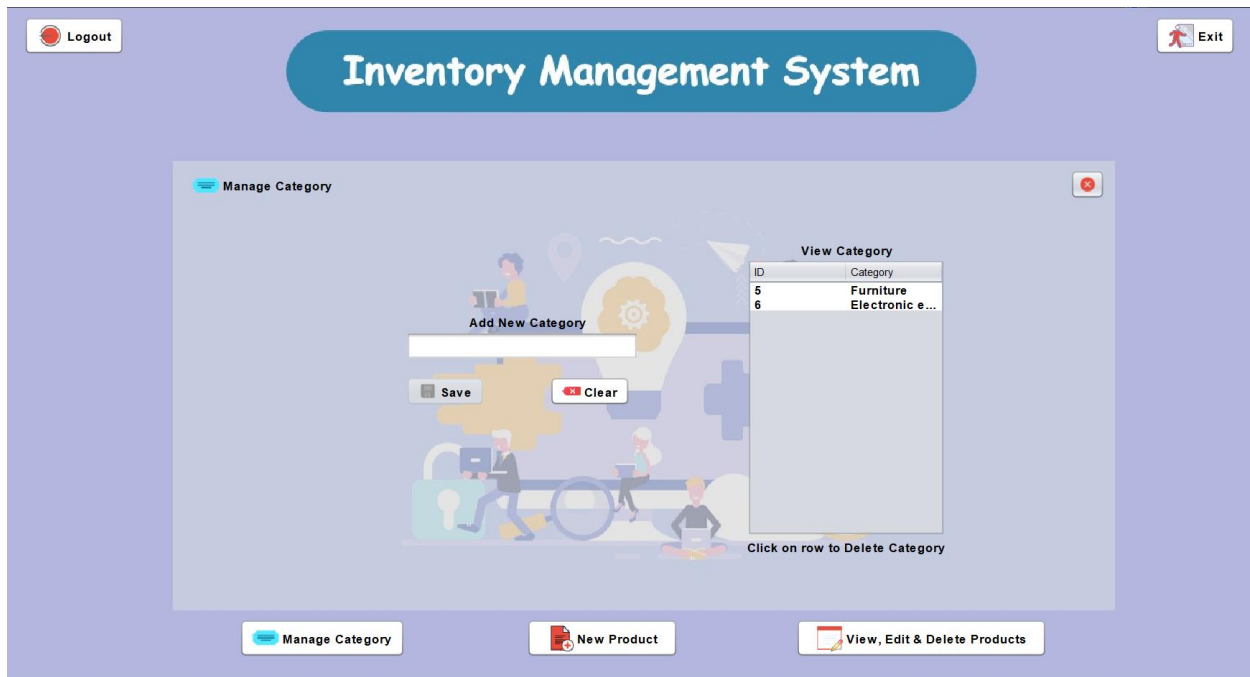


Figure 3

In here admin can add new category to the system according to their requirements. Already we added Furniture, electronic equipment and stationery categories to the system.

Next, when admin click on the “New Product” button, the interface will be display as shown in Figure 4.

The screenshot shows the 'New Product' form within the 'Inventory Management System' interface. The form includes the following fields and controls:

- Name:** A text input field containing the value 'Table'.
- Category:** A dropdown menu with 'Furniture' selected.
- Price:** A text input field containing the value '10000'.
- Quantity:** A text input field containing the value '15'.
- Buttons:** 'Save' and 'Clear' buttons are located at the bottom of the form.

The interface also features a 'Logout' button in the top left, an 'Exit' button in the top right, and a navigation bar at the bottom with three buttons: 'Manage Category', 'New Product', and 'View, Edit & Delete Products'.

Figure 4

In here admin can enter new items to the system, by entering item name, price, quantity and choosing the category from the dropdown box. "ItemID" will be generated automatically by the system. It will be display alert message shown in figure 5, after adding a new product successfully.

This screenshot shows the same 'New Product' form as in Figure 4, but with a modal alert message displayed in the center. The message box contains the following information:

- Title:** Message
- Icon:** An information icon (i).
- Text:** Product Added Successfully !
- Buttons:** An 'OK' button.

The background form and navigation elements remain the same as in Figure 4.

Figure 5

Next, when admin click on the “view, Edit & Delete Product” button, the choice interface will be display as shown in Figure 6.

The screenshot displays the 'Inventory Management System' interface. At the top, there is a 'Logout' button on the left and an 'Exit' button on the right. The main title 'Inventory Management System' is centered in a blue rounded rectangle. Below this, a modal window titled 'View, Edit and Delete products' is open. The modal contains a form on the left with fields for ID (00), Name, Category (a dropdown menu), Price, and Quantity. Below these fields are three buttons: 'Update', 'Delete', and 'Clear'. To the right of the form is a table with the following data:

ID	Name	Category	Price	Quantity
21	Table	Furniture	10000	15
22	Fan	Electronic equipment	15000	20

At the bottom of the main interface, there are three buttons: 'Manage Category', 'New Product', and 'View, Edit & Delete Products'.

Figure 6

In the left-hand side of the tab user can see the items that are in the system in a table. When admin add new items to the system the table will be automatically updated.

If admin wants to modify the existing item details, they just want to select that item from the table and after selected, the details will be appeared in the text boxes in the right-hand side. Then admin can perform necessary modifications to the recorded items. This process is shown in figure 7 & 8.

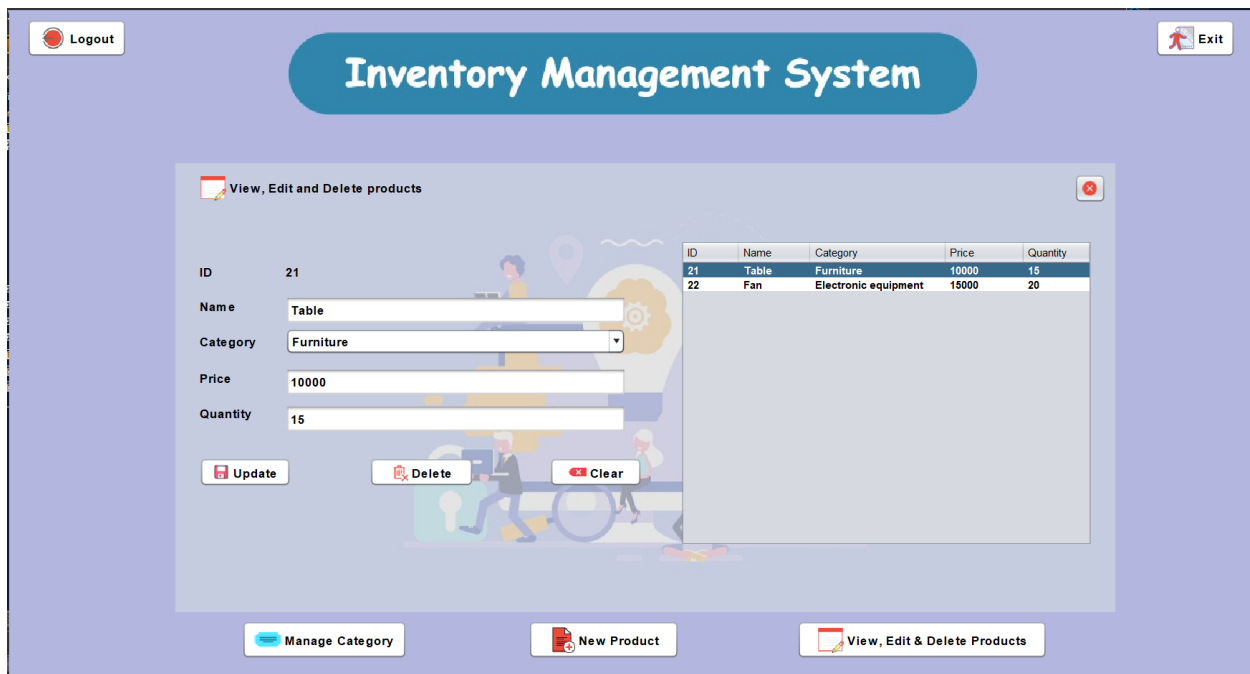


Figure 7

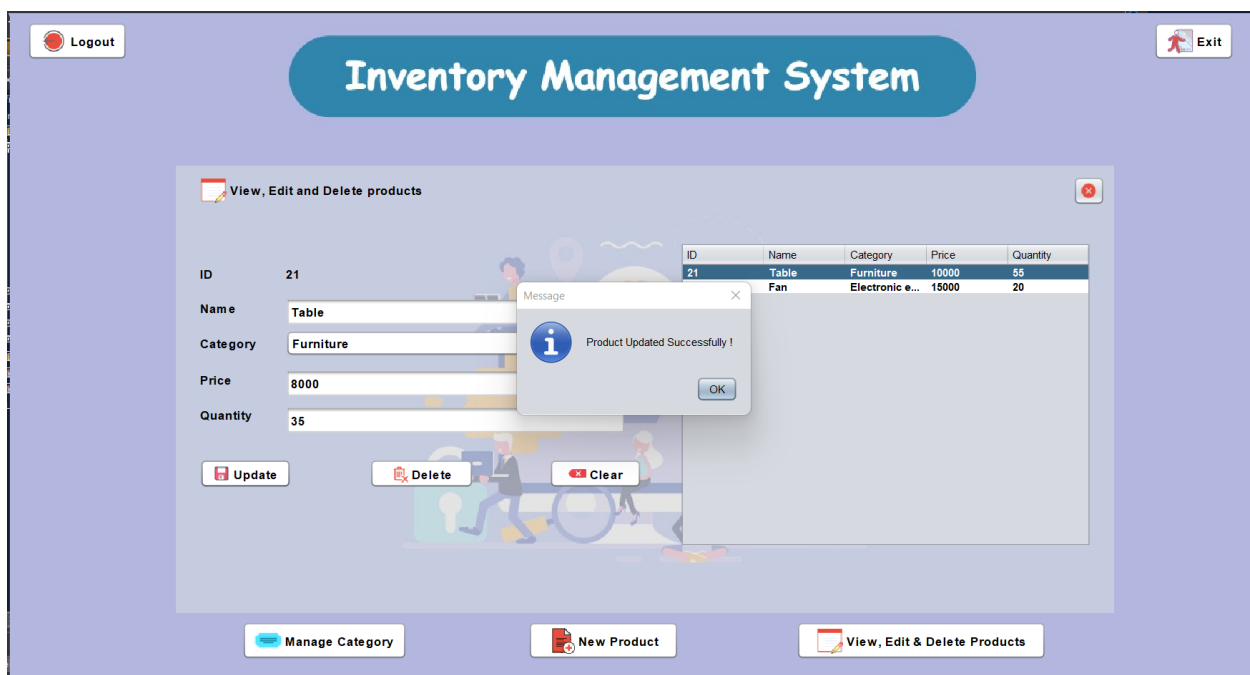


Figure 8

Also, if admin wants to remove unwanted items from the system, they just want to select that item from the table and after selected, the details will be appeared in the text boxes in the right-hand side. Then admin can remove it by using "delete" button. This process is shown in figure 9 & 10.

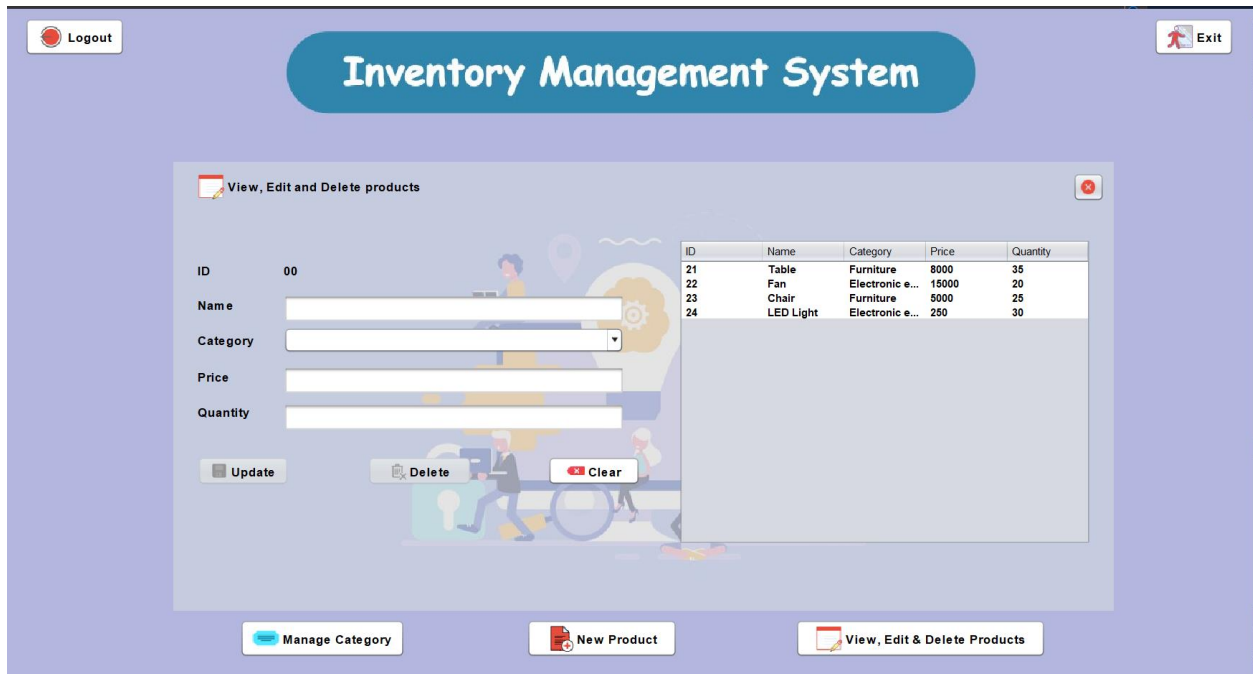


Figure 9

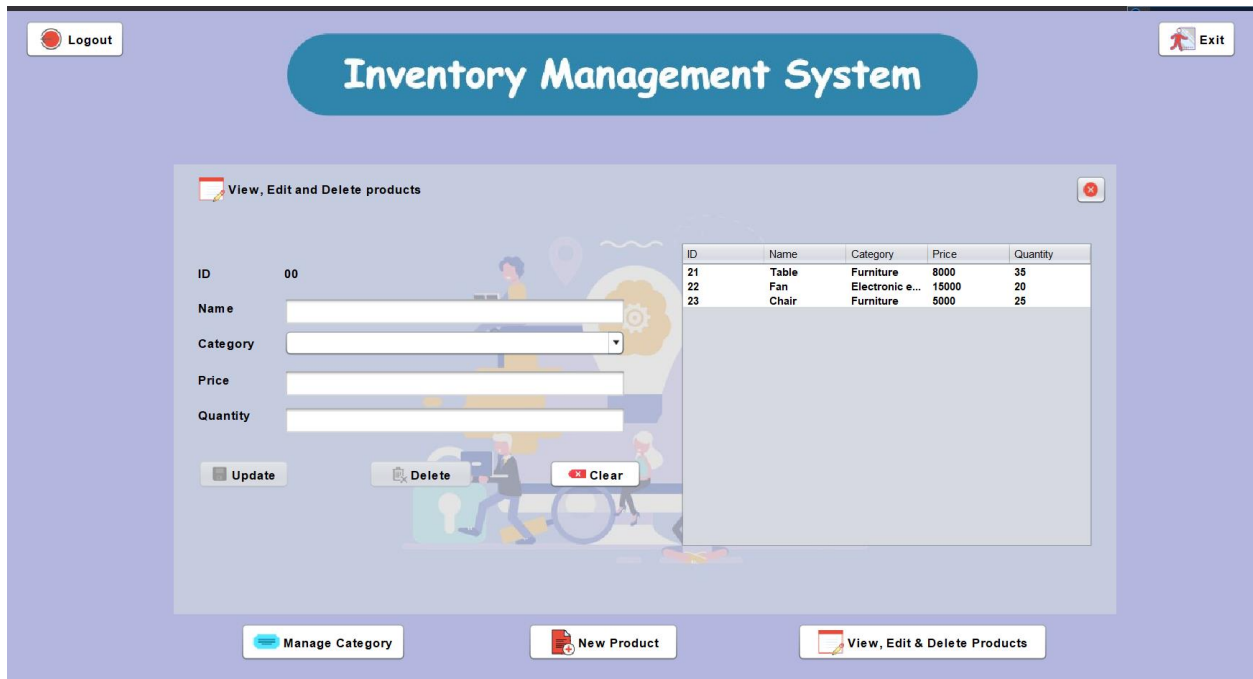


Figure 10

Finally, as shown in figure 11, if user wants to exit from the application there is an option button called "Exit", by pressing that button user can exit from the application.

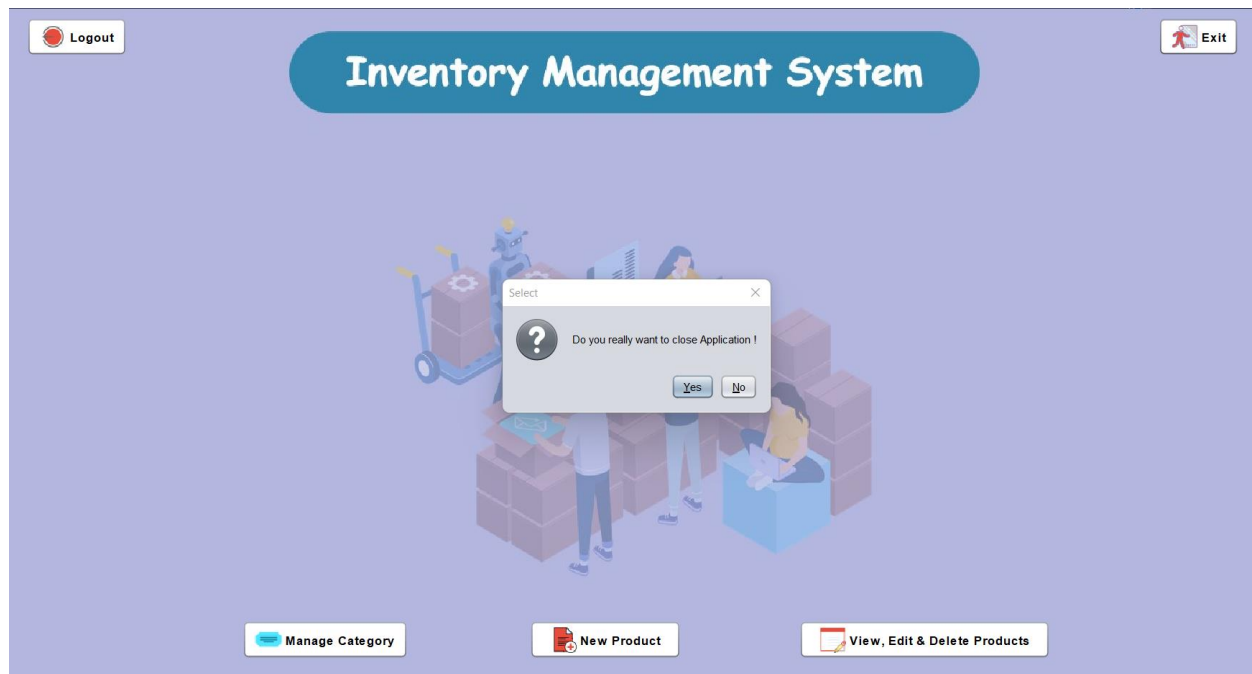


Figure 11

Required tools for the development of the system

- Apache NetBeans IDE 12.5
- MySQL Workbench 8.0 CE

Project Limitation

- allowed only Single admin to use.

User Interface

To create the user interface in Java NetBeans we use JButton, JLabels, JPanel, JTextBox and JFrame.