User Manual

I. Introduction

This user manual guides staff (Cashiers and Managers) to efficiently operate the SweetCupcake System. The system runs in a real-world bakery environment, so non-technical employees can navigate it easily. It is built using Java Swing (NetBeans) and is fully interactive, user-friendly, and responsive.

II. System Requirements

- **Software:** Windows OS, Java Runtime Environment (JRE), MS Access
- **Hardware:** Minimum 4GB RAM, 2GHz processor
- **Database**: sweetcupcake.accdb (MS Access file)

III. Launching the System

1. Open the project in NetBeans IDE and click Run Project, or run the compiled .jar file.
2. The Login Screen appears.
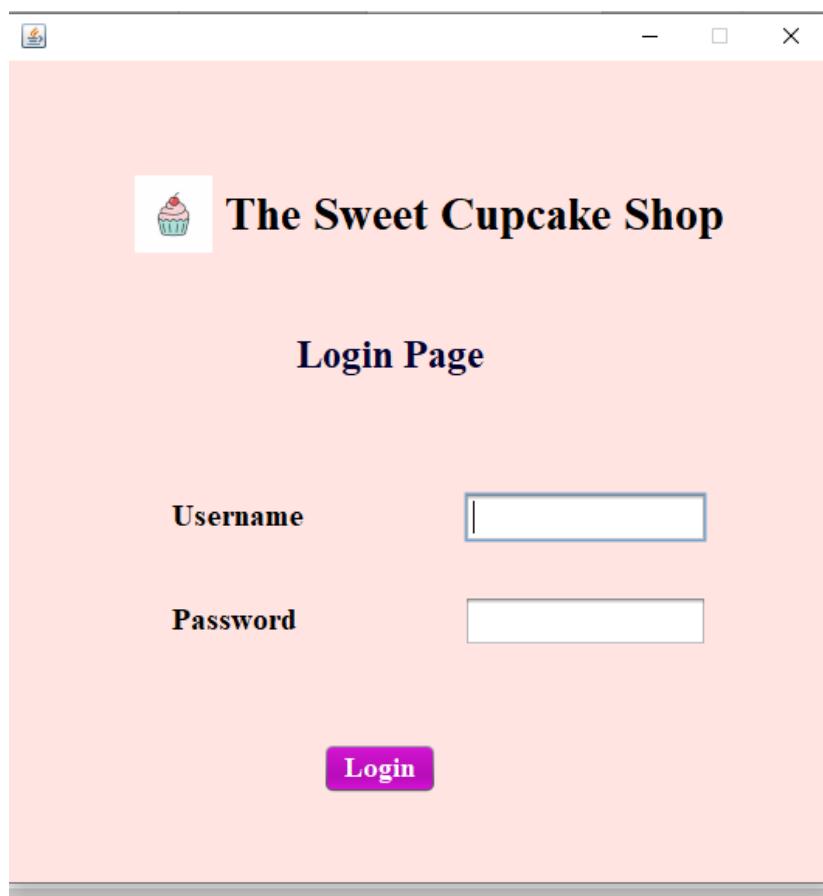
Figure 1:Login Screen

IV. Login Process

- **Username:** Enter your registered username.
- **Password:** Enter your password.
- **Login:** Click the button to enter.
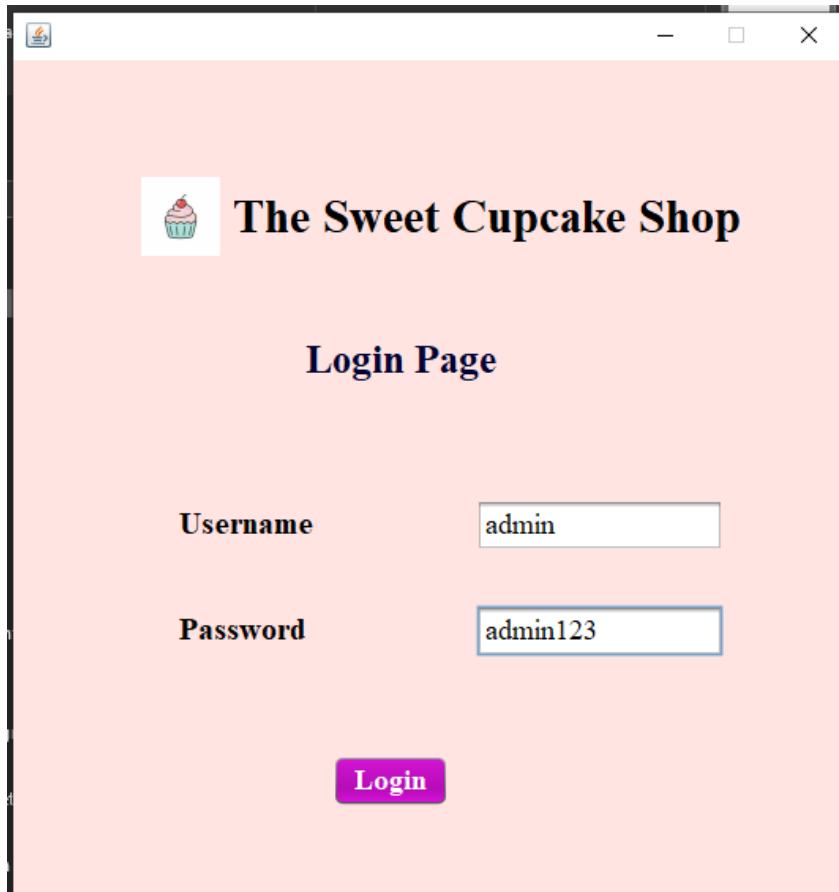
Figure 2:Enter Credentials

Example accounts:

- **Manager:** username = admin, password = admin123
- **Cashier:** username = Cashier1, password = cashier1

The system automatically records login information including user ID, role, and timestamp, for auditing purposes. When the correct login details are entered, the system will open either the Manager Dashboard or the Cashier Dashboard, depending on the user's role.

**Error Handling:** If incorrect, the system displays: "Invalid username or password."
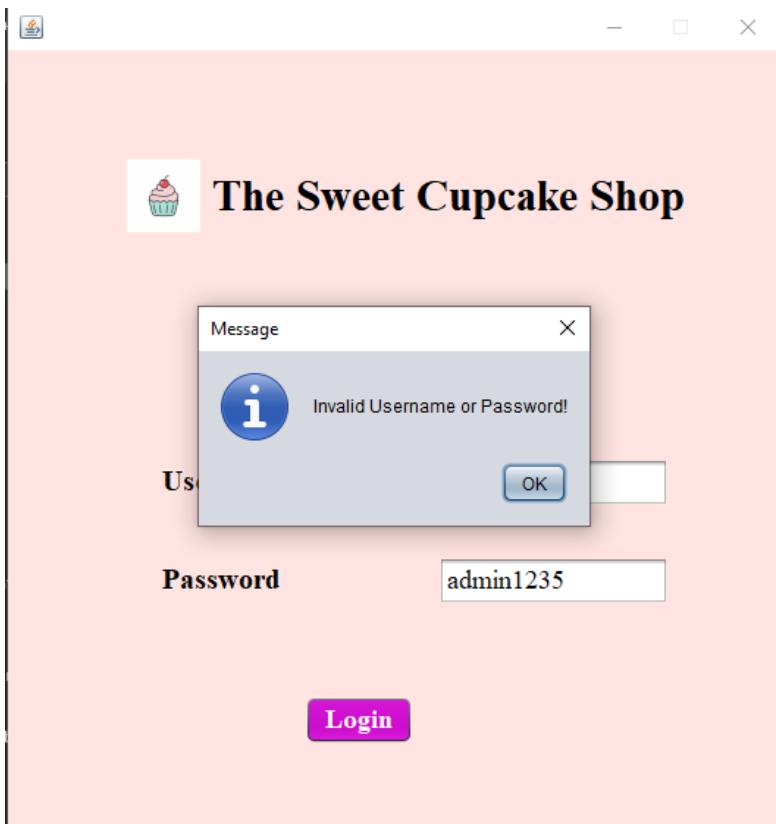
Figure 3:Incorrect Credentials

V. Cashier Functions

After logging in as a Cashier, the system opens the Cashier Dashboard.
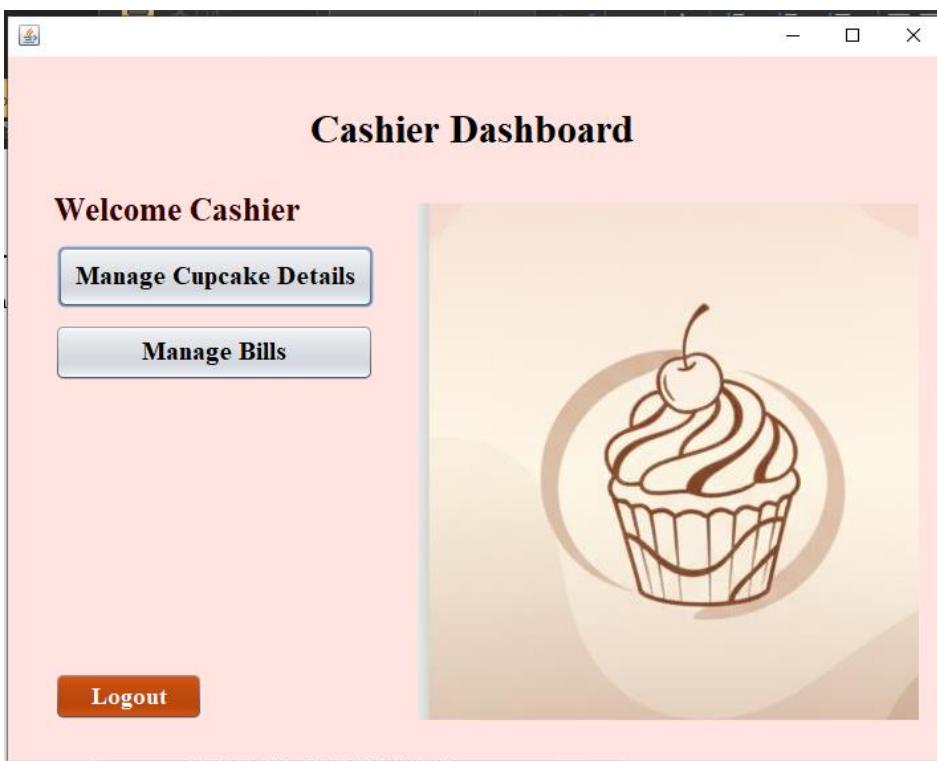
Figure 4:Cashier dashboard

Available Features for Cashier

1. **View Cupcakes:** Displays all cupcakes stored in the database.

Figure 5:View Cupcakes

2. **Add New Cupcake:** Cashier can add cupcake details – name, category, price, and quantity.

Figure 6:Add New Cupcake function

3. **Search Cupcakes:** Search by cupcake category.
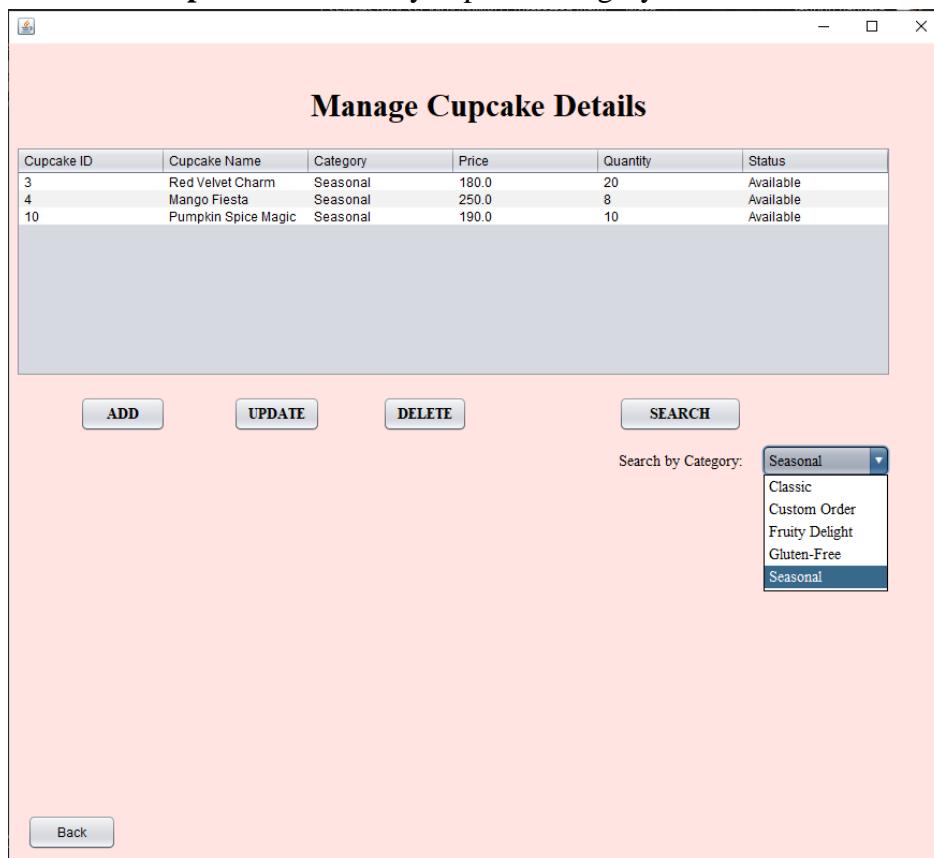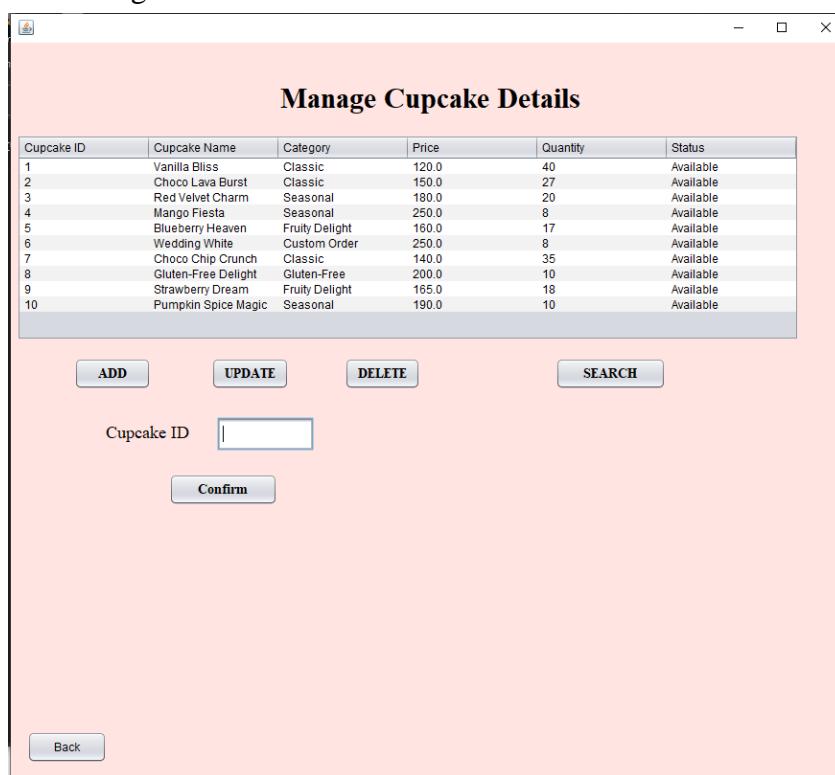
Figure 7:Search cupcakes by Category

4. **Delete Cupcake:** Remove cupcake from the database by entering Cupcake id and clicking Confirm.

5. **Update Cupcake:** Enables the Cashier to modify existing cupcake details, including name, category, price, status, and quantity.

Figure 8:Update Cupcake Function

6. **Enter a Sale:** Select a cupcake by entering its Cupcake ID. Once the id is entered, all relevant details such as name, category, and price are automatically populated from the database. The Cashier only needs to input the quantity, and the system calculates the total amount and generates the bill instantly. This automation ensures speed, accuracy, and minimizes manual errors.

Figure 9:Enter a Sale

7. **View Bill History:** Allows the Cashier to review past sales and transactions stored in the system.

Figure 10:Bill History Function

VI. Manager Functions

When logged in as Manager, the ManagerForm opens. Managers have all Cashier functions plus additional privileges:
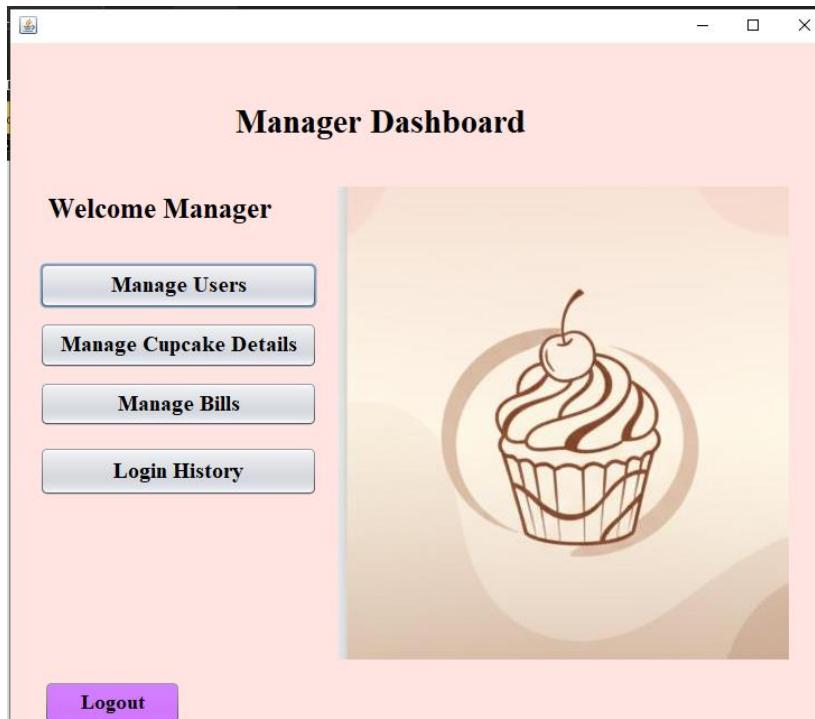
Figure 11:Manager Dashboard

1. **Add Cashier Accounts:** Enter casheir details and press **confirm** to create a new cashier.

Figure 12:Add User Function

2. **Update/Delete Users:** Modify or remove user accounts as required.

Figure 13:Update User Function
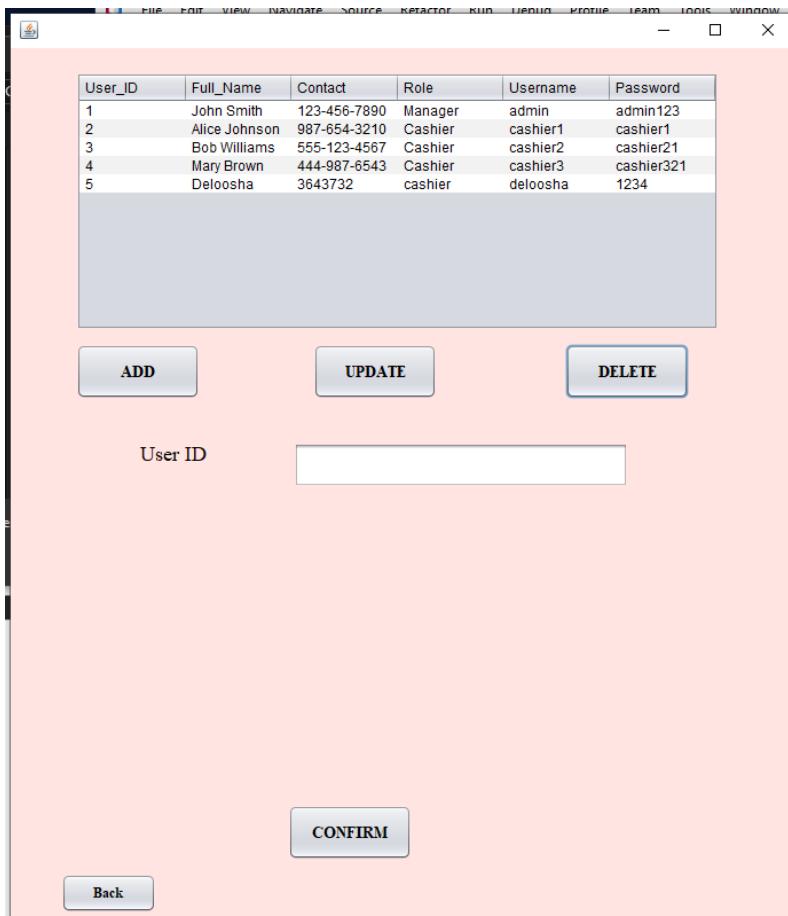
Figure 14:Delete User Function

3. **View Login History:** Monitor login records automatically captured by the system.
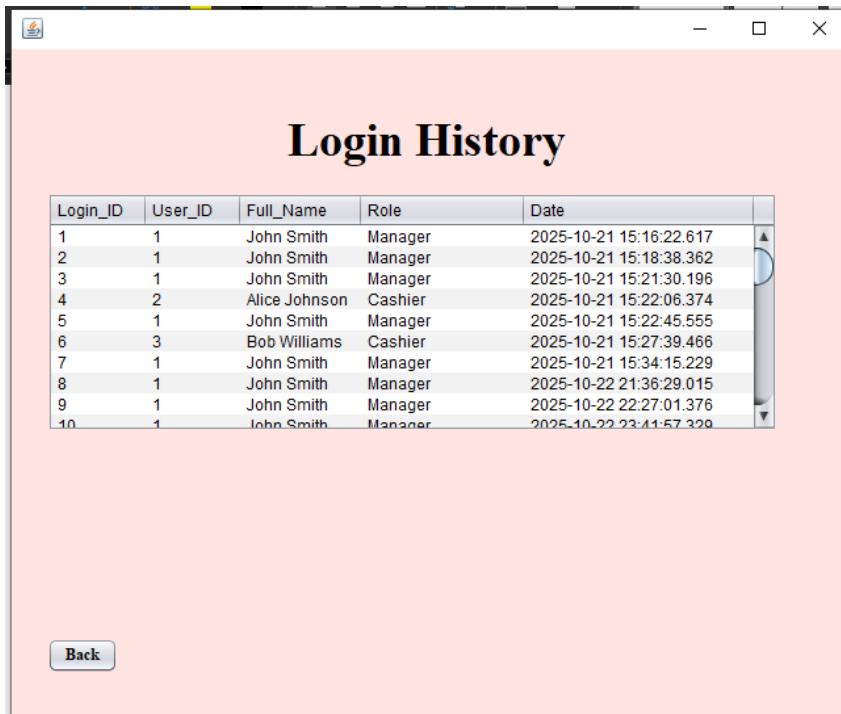
Figure 15:Login History Function

VII. Error Handling

- **Database connection failure:** "Error cannot connect to database."
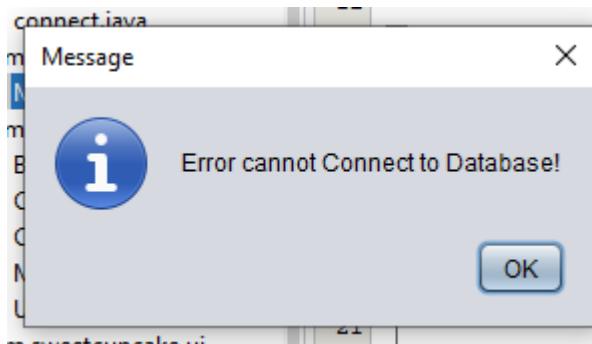
*Figure 16:Database Cconnection Failure*

- **Invalid input:** Text in numeric field shows "Please enter number."
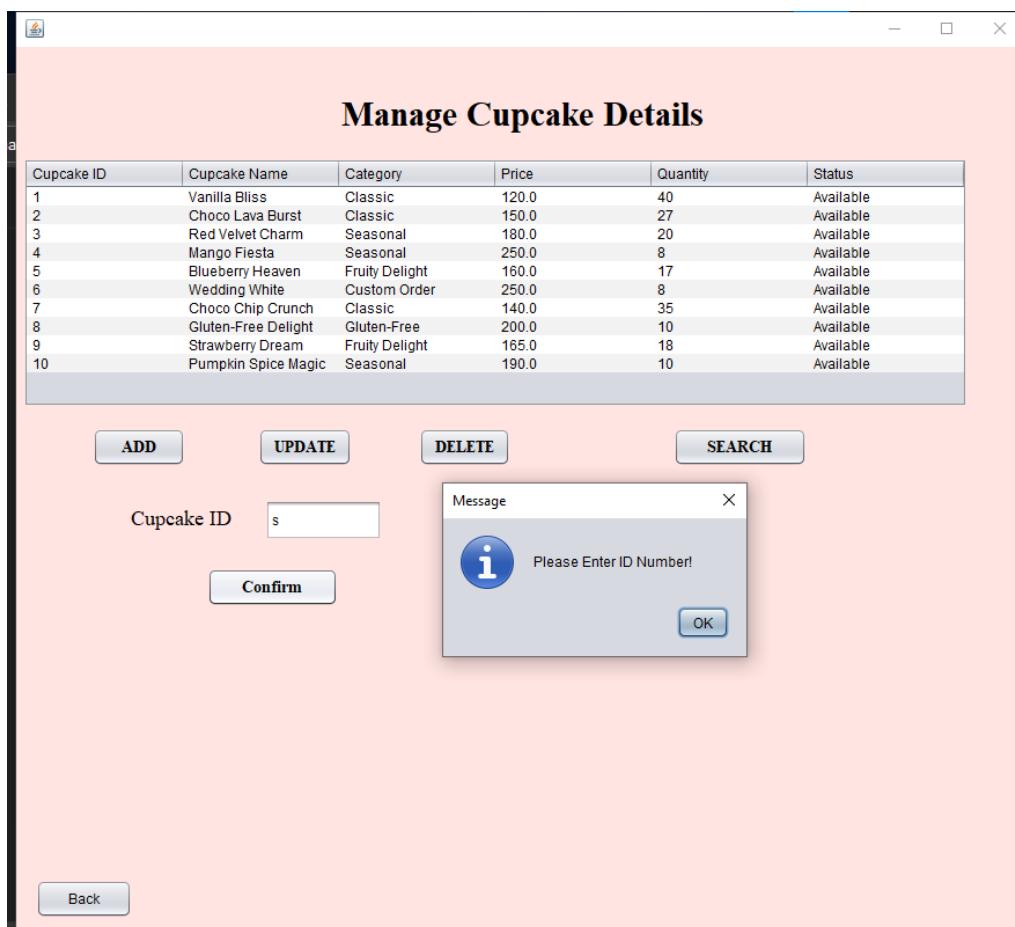

Figure 17:Error Message 1

- **Add Cupcake Without Filling All Fields:** Shows "Please fill in all fields."
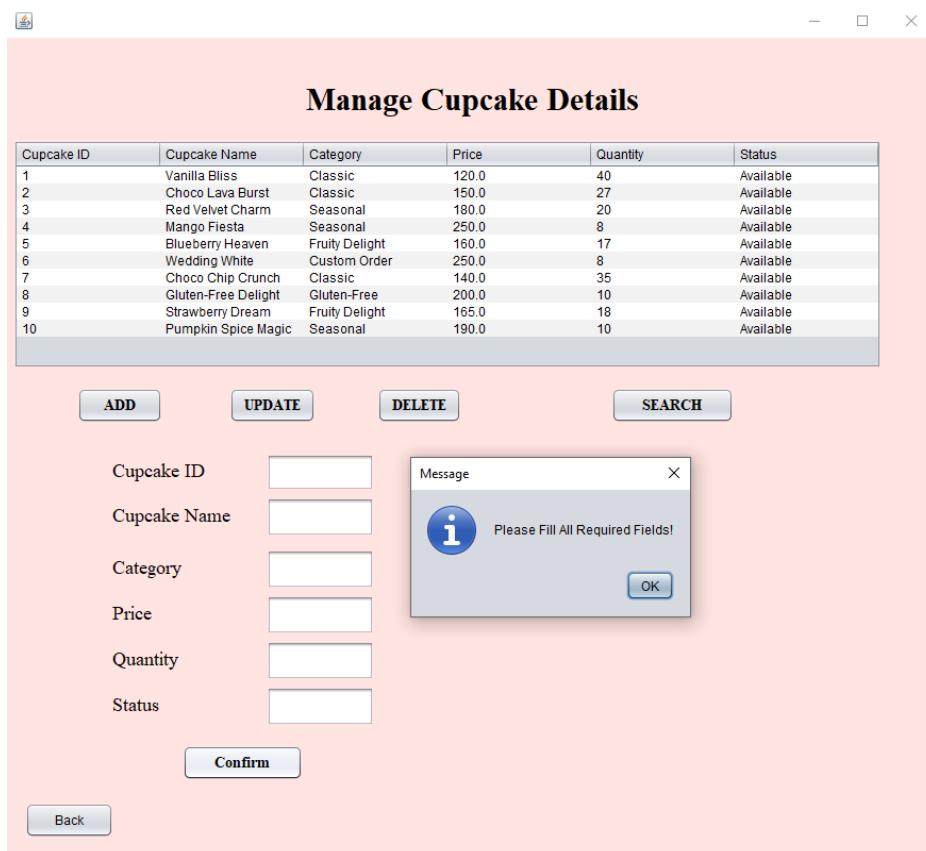
Figure 18: Error Message 2

- **Invalid Cupcake ID:** Displays an error message when the user tries to delete a cupcake that does not exist in the database.
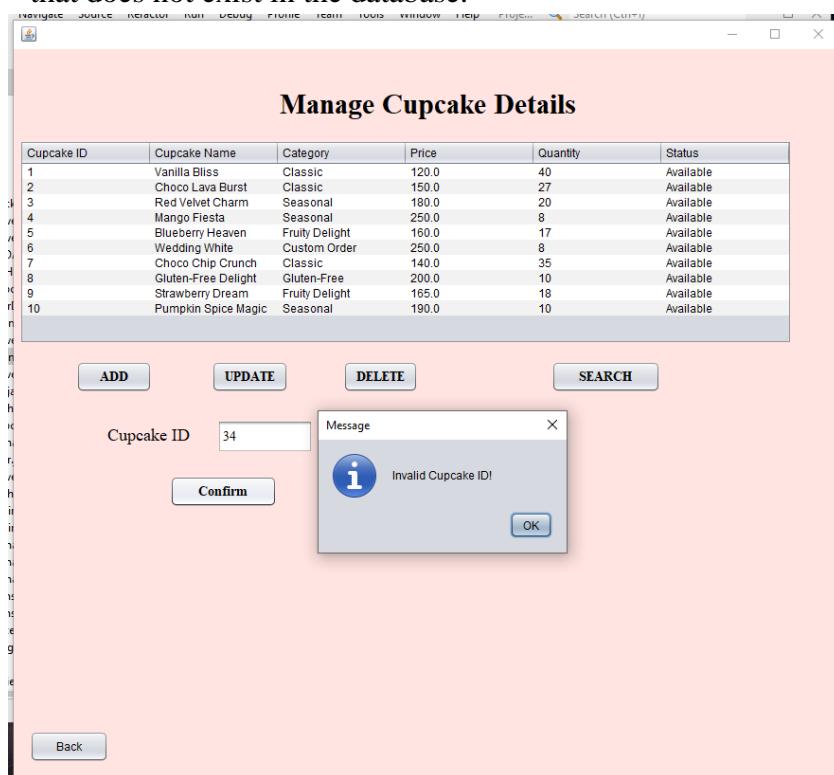

Figure 19:Error Message 3

- **Duplicate Cupcake ID:** Prevents adding cupcakes with an existing ID.

Figure 20:Error Message 4

VIII. Logout and Exit

- Close the form window to exit.
- User session ends automatically, and login info is recorded.

IX. System Navigation Guidelines

- **Buttons:** Confirm actions before deleting to avoid data loss.
- **Billing:** Enter cupcake ID and quantity only; other fields auto-fill and total calculates automatically.

X. Troubleshooting

- **Database missing** (sweetcupcake.accdb): Ensure file is in the project folder; restore from backup if deleted.
- **Cannot connect to database:** Verify UCanAccess driver is installed and added to project libraries; restart NetBeans.
- **Login not working:** Check username/password.

Default accounts: Manager: admin/admin123, Cashier: Cashier1/cashier1.

- **Cupcake not adding/saving:** Ensure all fields (name, category, price, quantity) are correctly filled; numeric fields must contain numbers.

- **Delete button not working:** Select a cupcake before pressing Delete.

This user manual ensures smooth operation for Cashiers and Managers. The system helps with day-to-day bakery operations such as cupcake management, sales, billing, account management, and auditing, making workflows efficient and reliable for better customer service.