

## **README:**

### **Installation:**

Download the file attached on the canvas and click the jar to run the program.

Click the CS3200.jar, login into your own SQL account.

Open MySQL, create the database using the dump provided.

Then login from CS3200.jar, creating a manager in the application. Then enter into the application.

### **Technical specification**

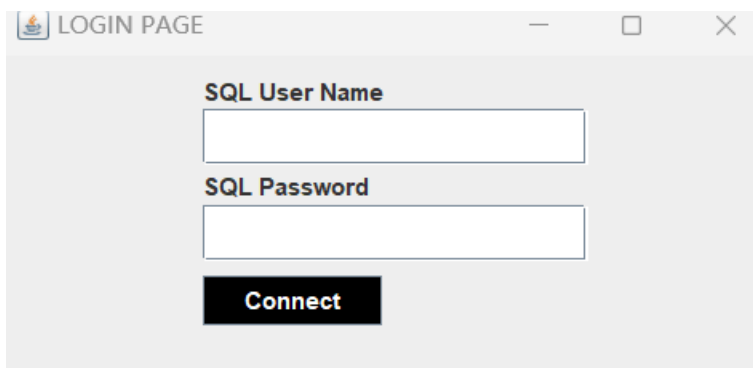
Environment: Java 11+

Software Needed: MySQL Workbench

Library: Java Swing, Java connector

### **Manipulations:**

At first, the market will ask to connect the MySQL with the username and password.



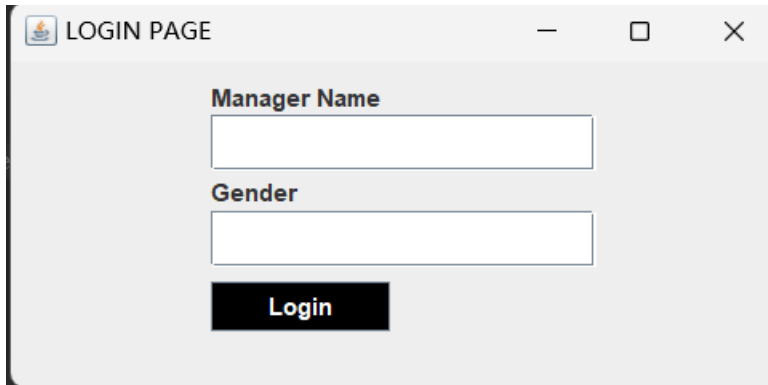
LOGIN PAGE

SQL User Name

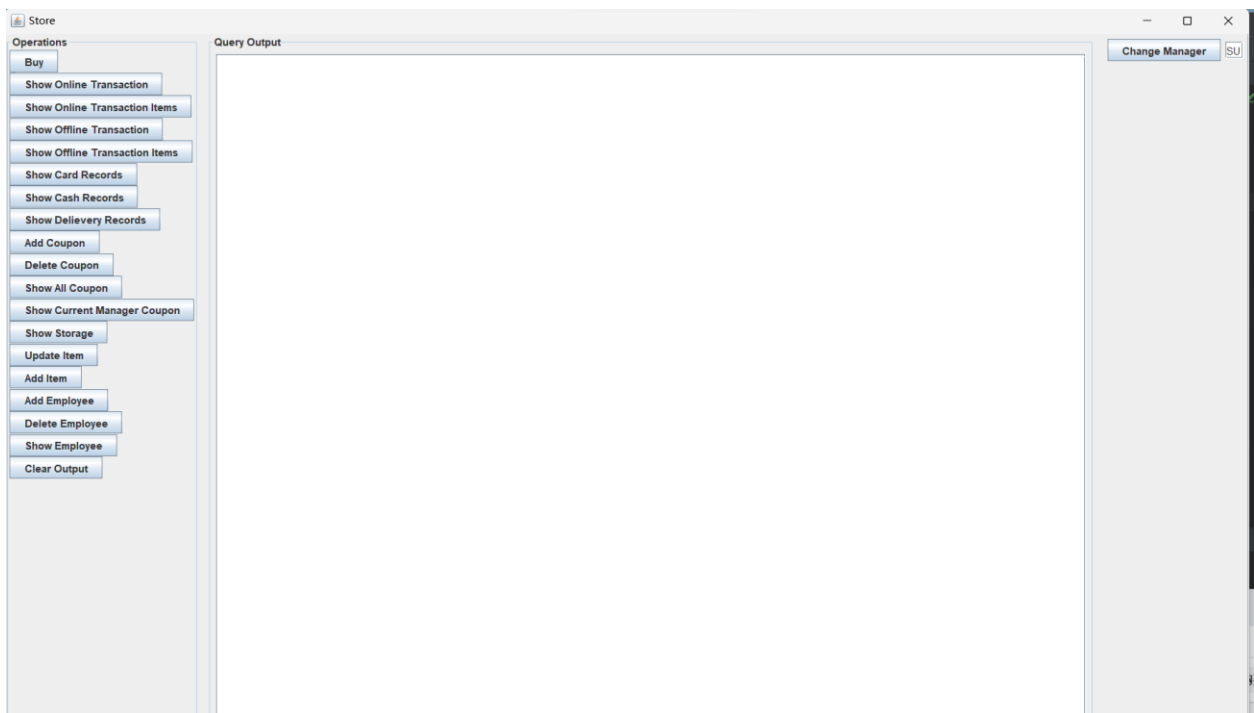
SQL Password

Connect

After successfully login to the MySQL, it will ask for the manager information:



Then the user has to enter the manager's name and gender. The manager's name will be remembered by the Market OS. For the next time login to the platform, the user has to provide the manager's name in order to login into the platform.



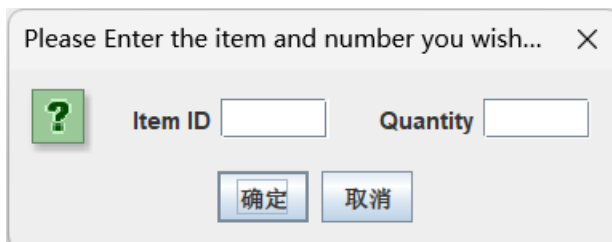
Then there is the page that shows all the operations that the Market OS can done.

The user can interact with the Market OS by clicking the button.

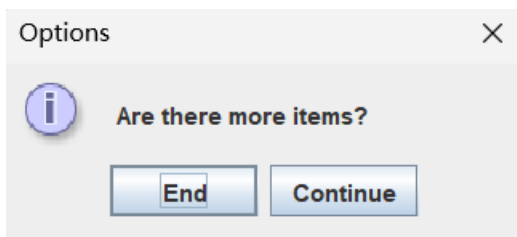
Buy: (if the storage is empty, the user cannot buy any item. So add item before buy item)

For “Buy” button, if the user clicks it, it will first let the user choose whether buy the item online or offline.

For online operation, the user have to enter the item ID(which can be get through show storage) and the quantity they want.

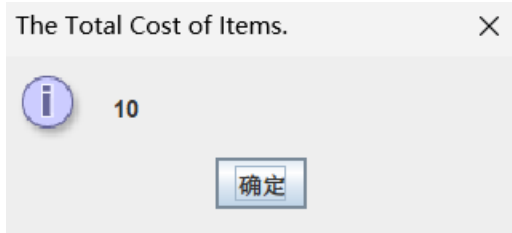


Then after the user confirm the operation(by clicking “确定” here, which means confirm), then the application will ask the user whether they want to create another transaction.



By clicking the end button, the user chooses to stop this buy process. By clicking the continue button, the user can add another item into the transaction.

After the edge has been added, the application will show the total cost for this transaction.

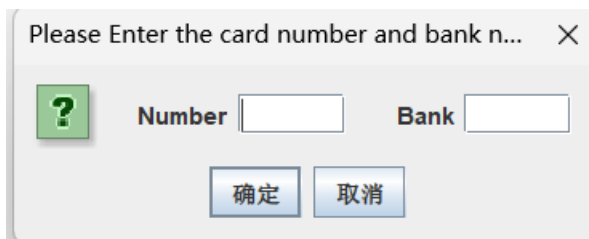


Then the application will ask for whether the coupon has been added.

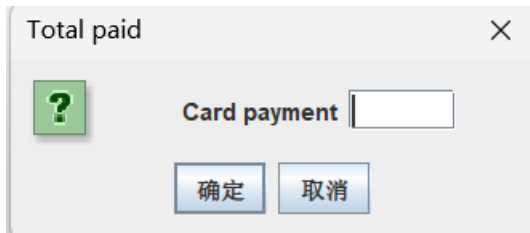


If the user doesn't have a coupon, they can click the confirm button("确定" in here. These buttons are all depend on the language of operating system. So if the operating system is English, the buttons will show in English.)

Then the application will ask the user for payment information. For online transaction, the user can online pay through card. So they have to enter the card id and bank name.



Then the user will ask for the card payment. The user has to enter the appropriate number of dollars. If the user pays the amount less than required, the transaction will fail. If the user enters the amount that greater than required, the money will not give back to the user's account.



A dialog box titled "Total paid" with a close button (X) in the top right corner. On the left is a green square icon with a white question mark. To its right is the text "Card payment" followed by an empty text input field. At the bottom are two buttons: "确定" (Confirm) and "取消" (Cancel).

After the payment has been entered, the application will ask for the address information and receiver information.



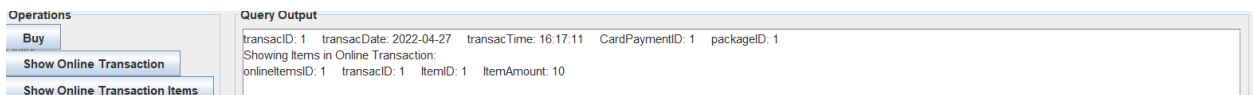
A dialog box titled "Shipping Information" with a close button (X) in the top right corner. On the left is a green square icon with a white question mark. To its right are two labels: "Address" and "Receiver", each followed by an empty text input field. At the bottom are two buttons: "确定" (Confirm) and "取消" (Cancel).

Then, the user have to enter the shipping company.



A dialog box titled "Please Choose Shipping Company" with a close button (X) in the top right corner. On the left is a green square icon with a white question mark. To its right is the text "Shipping Company" followed by an empty text input field. At the bottom are two buttons: "确定" (Confirm) and "取消" (Cancel).

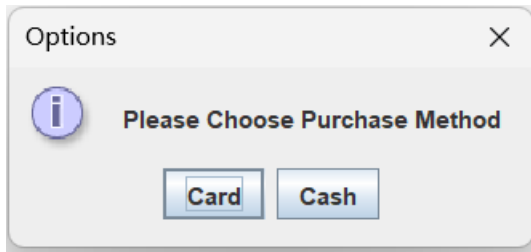
After the user click the confirm button, they can successfully finish this transaction and all the information will be showed in the GUI of the application.



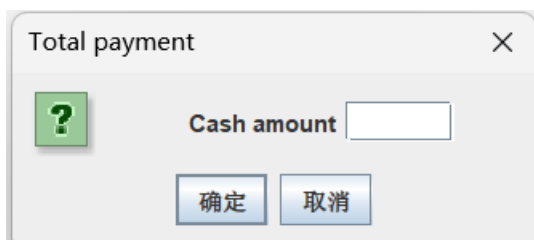
The main application window is divided into two panes. The left pane, titled "Operations", contains a list of buttons: "Buy", "Show Online Transaction", and "Show Online Transaction Items". The right pane, titled "Query Output", displays transaction details in a text area. The text in the right pane is as follows:

```
transacID: 1  transacDate: 2022-04-27  transacTime: 16:17:11  CardPaymentID: 1  packageID: 1
Showing Items in Online Transaction:
onlineItemsID: 1  transacID: 1  ItemID: 1  ItemAmount: 10
```

For offline transaction, they have all the process similar to online. However, they have two ways make the payment.



The payment through card will similar to that of online payment. For cash, the user have to enter the cash amount they want to give.



They after the payment, the user doesn't have to enter the address and receiver information and the transaction is successfully created.

The user can query the information they want by clicking different buttons. There are:

- 1) show online transactions: all the online transaction records can be found here
- 2) show online transaction items: all the corresponding online transaction items can be found here
- 3) show offline transactions: all the offline transaction records can be found here
- 4)
- 5) show offline transaction items: all the corresponding offline transaction items can be found here
- 6)
- 7) show card record: all the payment paid by card will be recorded and can be found here
- 8) show cash record: all the payment paid by cash will be recorded and can be found here

- 9) show delivery record: all the delivery information can be found here
- 10) show all coupon: all coupons information can be found here
- 11) show current manage coupon: show the coupon created by current manger
- 12) show storage: show all the items with item ID, name, quantity and price
- 13) show employee: show all the employee information including employee ID, employee name, employee gender, job description and employee data

#### Add Coupon:

When add coupon button is clicked, the application will ask the user to enter the coupon password and the discount. And the information entered will be recorded in the database.



A screenshot of a Windows-style dialog box titled "Please Enter Coupon Information" with a close button (X) in the top right corner. On the left, there is a green square icon containing a white question mark. To the right of the icon, the text "Coupon PWD" is followed by a text input field. Further right, the text "Discount" is followed by another text input field. At the bottom center, there are two buttons: "确定" (Confirm) and "取消" (Cancel).

#### Delete Coupon:

When delete coupon button is clicked, the application will ask the user to enter the coupon password to delete the coupon given. And the information entered will be recorded in the database.



A screenshot of a Windows-style dialog box titled "Please Enter Coupon ID" with a close button (X) in the top right corner. On the left, there is a green square icon containing a white question mark. To the right of the icon, the text "Coupon ID" is followed by a text input field. At the bottom center, there are two buttons: "确定" (Confirm) and "取消" (Cancel).

Update Item:

When the update item button is clicked the application will ask the user to enter the item id and the amount that should be decreased. And the information entered will be recorded in the database. And the information entered will be recorded in the database.



A dialog box titled "Please Enter Update Information" with a close button (X) in the top right corner. On the left, there is a green square icon with a white question mark. To the right of the icon, the text "Item ID" is followed by a text input field. Further right, the text "Amount decreased" is followed by another text input field. At the bottom of the dialog, there are two buttons: "确定" (Confirm) and "取消" (Cancel).

Add Item:

When the add item is clicked, the application will ask the user to enter the item name, item quantity and item price. And the information entered will be recorded in the database.

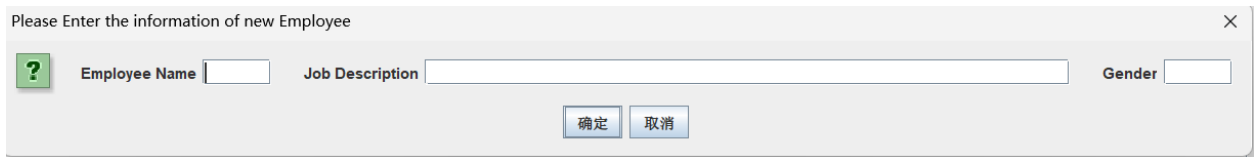


A dialog box titled "Please Enter the information of new Item" with a close button (X) in the top right corner. On the left, there is a green square icon with a white question mark. To the right of the icon, the text "Item name" is followed by a text input field. Further right, the text "Item amount" is followed by a text input field. To the right of that, the text "Price" is followed by a text input field. At the bottom of the dialog, there are two buttons: "确定" (Confirm) and "取消" (Cancel).

Add employee:



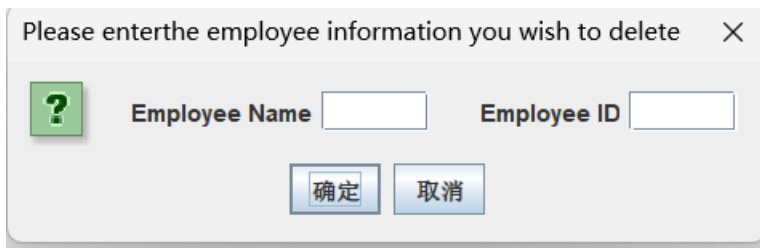
When the add employee button is clicked, the application will ask user to enter the employee's name, job description and gender. And the information entered will be recorded in the database.



A screenshot of a Windows-style dialog box titled "Please Enter the information of new Employee". The dialog box has a close button (X) in the top right corner. On the left side, there is a green square icon with a white question mark. The main area contains three input fields: "Employee Name" (a short text box), "Job Description" (a long text box), and "Gender" (a short text box). At the bottom right, there are two buttons: "确定" (OK) and "取消" (Cancel).

Delete Employee:

When the delete employee is clicked, the application will ask user to enter the employee's name and employee ID. If invalid information is entered, the operation will fail. All the information entered will be recorded in the database.




A screenshot of a Windows-style dialog box titled "Please enter the employee information you wish to delete". The dialog box has a close button (X) in the top right corner. On the left side, there is a green square icon with a white question mark. The main area contains two input fields: "Employee Name" and "Employee ID", both represented by short text boxes. At the bottom center, there are two buttons: "确定" (OK) and "取消" (Cancel).

Change manager:

When the change manager is clicked, the user has to enter the manager name and gender.

When the manager is successfully changed, the information will change.

Please enter new manager information ×

 **Manager name**  **Gender**