

CSE 215

Spring 2020

Section 4

Complete Instruction to Run Project with Contribution



ABC Canteen Management System

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Instructions to Run the Project

Requirements:

- MySQL-connector-java-8.0.20 for database connectivity.
- Java IDE (eclipse)

1. Download zip file named “SP2020_FinalAssignment_CSE215.4Lab” and extract the file.
2. **Create a package named mp** Save the java files and images in a Java project package. There are 6 java files- Swing, Myfiles, LogFile, signUp Canteen and Inventory and there are two pictures named *log* and *icon*.
3. For database connection, create a new database named **project**. Select--> **project** database Click_On---> Import Brouse----> **project.sql** Click_On---> Go.
4. For selecting project path Copy a folder named **lib** and paste it into java project folder. Open eclipse IDE, refresh project folder.
5. Inside eclipse IDE, Right_Click_On project folder -->Build path---> configure build path. Select Classpath----> add jar----> project file---->lib----> mysql-connector-java8.0.20.jar. Then click OK ---> Apply and Close.
N.B: database.txt file contains all tables for database also.
6. Now, the project is ready to run. Run swing class as swing is the first class of this project.
7. Click SIGN UP button and create user account.
8. Write proper user name and password, click SIGN IN.
9. Add food items for basic menu and select ADD button to add those in Live Menu.
10. To create receipt, select desired items from live menu and provide quantity. After that, Select Total. Receipt will be created.
11. For cashless transaction, click Inventory. Select Customer Information tab, Create customer account and with balance. Balance recharge is also possible using customer account Id. User can add voucher from voucher tab of Inventory.
12. Now, user can implement cashless transaction. For this transaction, user need to provide customer Id. For additional discount user can provide voucher (voucher is applicable only for cashless transaction) and click proceed button.
13. Click print button to print the receipt. And the amount will be stored in database under selll table.
14. Click Reset button to reset all the text fields and text area. It will help to reuse the program.
15. Click Inventory. User can create customer account and recharge account from Customer Information tab. Customer name and Id will be stored in database under customer table.
16. From Employee Information tab, user can create employee details with picture and it will store into database under employee table.
17. From purchase request tab, user can maintain daily procurements. The purchase amounts will be added on database under purchase table.
18. User can add voucher. Customer using cashless transaction can get 5% discount for using this voucher.

19. From records tab, user can monitor total expense from daily purchase and employee salary, total revenue from sell amount. User can get the profit or loss information from records.

Project Details with Contribution

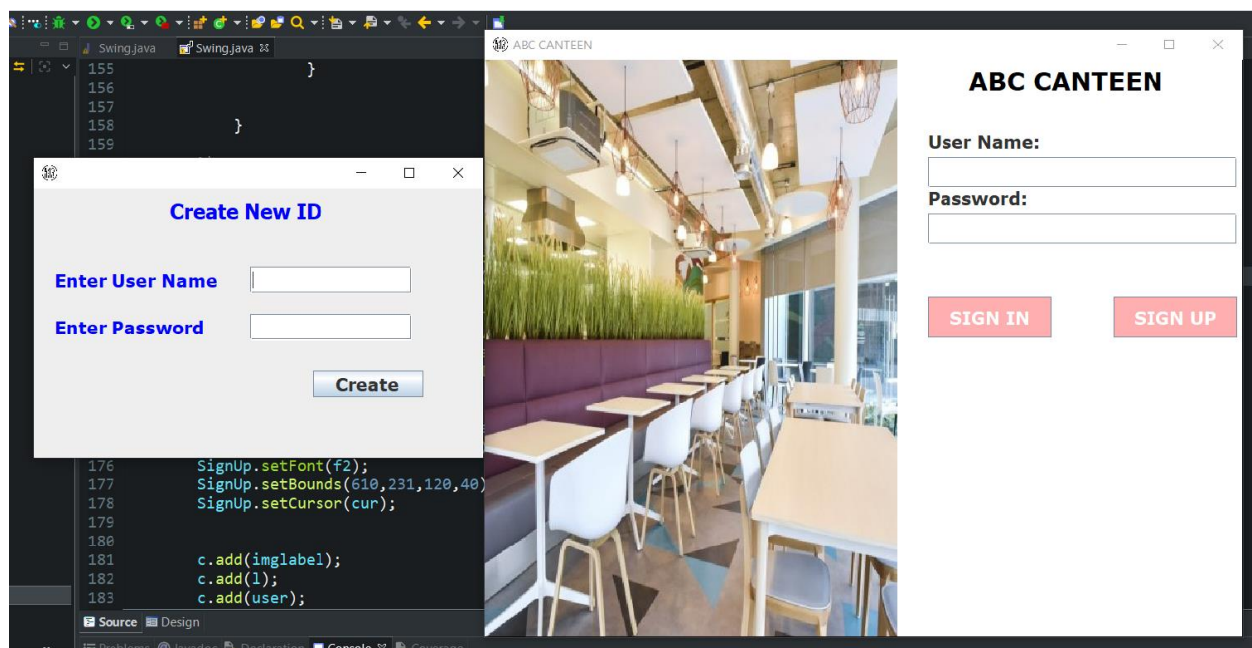
Login System:

User have to create an account with user name and password to login into the system. For this click->**SIGN UP** button of “ABC CANTEEN” window. A new window will create and can create the account with user name and password. After providing the correct user name and password user can enter into the main window named CANTEEN.

We have created two buttons in ABC_CANTEEN window.

1. **SIGN UP:** It opens a new window. Then it creates a new file named LogInFile.txt and store user name and password from text fields.
2. **SIGN IN:** The ActionListener method of this button is located in “swing” class. It reads data from LogInFile.txt and tries to match with text fields. If the file data matches with text fields, visibility of CANTEEN window becomes true.

Contribution: SIGN_UP and design using GUI is done by Rafi Majid and SIGN_IN done by Akmam Hasan.



Basic Menu:

Basic menu shows basic food items of the canteen. It holds JRadioButtons as food item and user cannot manipulate this. User can add and remove those food items and manipulate the menu in Live_Menu panel.

In Basic_Menu panel we add 4 buttons. Add, Remove, Reset and Logout button.

- **Add Button:** This button is created in Canteen class. The visibility of selected food menu will become true in Live-Menu panel after clicking this button.
- **Remove Button:** This is also created in Canteen class and the visibility of selected food menu will become false after clicking this button.
- **Reset Button:** Reset makes all radio buttons in Basic_Menu false and helps to reuse the program.
- **Logout Button:** Logout Button helps user to exit from the program.

Contribution: Add, Remove, Reset, Logout features and GUI implementations are done by Akmam Hasan.

Live Menu:

After adding food items from Basic Menu, those available food items will show on Live Menu. Live menu contains checker box, text fields and a button named Total.

- **Total Button:** This button is also created in canteen class and located inside 2nd panel- Live Menu. After selecting the button, it takes string values of text fields which indicate the quantity of each food from selected checker box and convert the string into integer. Then it appends the food item name and price inside Receipt text area. Lastly, it appends the total amount of purchase in Receipt.

Contribution: Implementing GUI, Basic Menu, Live Menu, Total button are done by Akmam Hasan.

Feature Output:

The screenshot displays the 'ABC Canteen Management System' interface. It is divided into three main sections: Basic Menu, Live Menu, and Receipt.

Basic Menu: Contains a list of food items with radio buttons for selection. The items are: Chicken Burger, Beef Burger, Shwarma, Ice Tea, Sandwich, Club Sandwich, Coca Cola, Fanta, Chicken Fry, Chicken Kabab, and Beef Kabab. At the bottom of this section are buttons for 'Add', 'Reset', 'Remove', and 'Logout'.

Live Menu: Displays the selected items from the Basic Menu. It includes a 'Total' button at the bottom. Below the Live Menu is a section for 'Cashless Transaction & Vouchers' with input fields for 'Id' and 'Voucher', and a 'Proceed' button.

Receipt: Displays a receipt table with columns for 'DESCRIPTION', 'QUANTITY', and 'PRICE'. At the bottom of this section are buttons for 'Refresh', 'Print', and 'Inventory'.

Here, we select 6 food items from Basic Menu and Add them.

This screenshot shows the same 'ABC Canteen Management System' interface after adding items. The 'Basic Menu' section remains the same. The 'Live Menu' section now shows six items with checkboxes and input fields for quantity: Chicken Burger, Beef Burger, Shwarma, Ice Tea, Sandwich, and Club Sandwich. The 'Total' button is still present. The 'Cashless Transaction & Vouchers' section and the 'Receipt' section are also visible, with the 'Receipt' section showing a table with columns for 'DESCRIPTION', 'QUANTITY', and 'PRICE'.

After adding them, the selected items will become visible in Live Menu.

ABC Canteen Management System

*****Basic Menu*****

☒ Chicken Burger ☐ Coca Cola
☒ Beef Burger ☐ Fanta
☒ Shwarma ☐ Chicken Fry
☒ Ice Tea ☐ Chicken Kabab
☒ Sandwich ☐ Beef Kabab
☒ Club Sandwich

*****Live Menu*****

☒ Chicken Burger 2
☒ Beef Burger 1
☒ Shwarma 1
☐ Ice Tea
☐ Sandwich
☐ Club Sandwich

Total

*****Cashless Transaction & Vouchers*****

Id :

Voucher :

Proceed

*****Receipt*****

-----RECEIPT-----

DESCRIPTION	QUANTITY	PRICE
Chicken Burger	2	180
Shwarma	1	70
Beef Burger	1	110
Total Amount:		360.0

Refresh **Print** **Inventory**

Add **Reset** **Remove** **Logout**

As per customer requirement, after selecting checker box and add quantity in text fields we need to press Total button. And it will append the receipt in text Area.

Cashless Transaction & Voucher:

Cashless Transaction feature will help the user to pay for their purchase from their account balance. They can create customer account and recharge their balance also (we include this feature inside inventory) Voucher is applicable for only cashless transaction. If any customer pay using their customer account, they can use voucher and get 5% discount on Total amount.

We implement this feature inside proceed button.

➤ Proceed Button:

proceed button match text field string with file data. (For every customer, a new file will be created. We use customer id as file name and insert balance inside customer file. We insert this part inside Inventory). Proceed button matches the file using customer id and call **CashlessRead** method. We implement CashlessRead method inside **LogFile** class. This method takes the amount from the file and insert a new amount after transaction. We use another method CashlessWrite for inserting new value in the specific file.

This button also matches voucher text field with voucher file. (We can create voucher file and add voucher name inside Inventory). Voucher is providing 5% discount currently.

- **Contribution:** Cashless Transaction, CashlessRead method, CashlessWrite method, proceed button are done by Rafi Majid. Voucher, Design using GUI are implemented by Akmam Hasan.

Receipt:

Receipt is created in a text Area. Food item name, quantity, price, total price, price after discount and necessary message is appended inside text area.

- **Contribution:** Receipt is done by Akmam Hasan.

Print:

This button can print the text area using `textArea.print();` method. We also implemented database inside this button. In database, we have created a table named `selll`. In `selll` table, the sell amount is adding to show count the total sell.

Reset Button: Reset button makes all checker box, txt fields and text Area empty to reuse the program without closing.

- **Contribution:** print method, reset button is implemented by Akmam Hasan and database part is written by Rafi Majid.

Feature Output:

Select food item and quantity. Click--> Total. Receipt shows total amount.

The screenshot displays the ABC Canteen Management System interface. It is divided into three main sections:

- Basic Menu:** A list of items with radio buttons for selection: Chicken Burger, Beef Burger, Shwarma, Ice Tea, Sandwich, Club Sandwich, Coca Cola, Fanta, Chicken Fry, Chicken Kabab, and Beef Kabab. At the bottom are buttons for Add, Reset, Remove, and Logout.
- Live Menu:** A section for selecting items with checkboxes and quantity input fields: Chicken Burger, Beef Burger (checked, quantity 2), Shwarma, Ice Tea (checked, quantity 2), Sandwich, and Club Sandwich. A red Total button is at the bottom right. Below this is a section for Cashless Transaction & Vouchers with fields for Id and Voucher, and a Proceed button.
- Receipt:** A section titled "****Receipt****" showing a receipt table. The table has columns for DESCRIPTION, QUANTITY, and PRICE. It lists Beef Burger (2, 220) and Ice Tea (2, 50), with a Total Amount of 270.0. At the bottom are buttons for Refresh, Print, and Inventory.

Add Id for cashless transection. If customer has voucher add voucher.

ABC Canteen Management System

****Basic Menu****

☒ Chicken Burger ☐ Coca Cola
☒ Beef Burger ☐ Fanta
☒ Shwarma ☐ Chicken Fry
☒ Ice Tea ☐ Chicken Kabab
☒ Sandwich ☐ Beef Kabab
☒ Club Sandwich

Add Reset Remove

Logout

****Live Menu****

☐ Chicken Burger
☒ Beef Burger 2
☐ Shwarma
☒ Ice Tea 2
☐ Sandwich
☐ Club Sandwich

Total

****Cashless Transaction & Vouchers****

Id : 001

Voucher : awamileague

Proceed

****Receipt****

-----RECEIPT-----

DESCRIPTION	QUANTITY	PRICE
Beef Burger	2	220
Ice Tea	2	50
Total Amount:		270.0
Pay:		256.5

Cashless transaction successfully completed.

Refresh Print Inventory

Click--> proceed. Receipt shows amount to pay after getting discount. Click--> print and the receipt will be printed.

ABC Canteen Management System

****Basic Menu****

☒ Chicken Burger ☐ Coca Cola
☒ Beef Burger ☐ Fanta
☒ Shwarma ☐ Chicken Fry
☒ Ice Tea ☐ Chicken Kabab
☒ Sandwich ☐ Beef Kabab
☒ Club Sandwich

Add Reset Remove

Logout

****Live Menu****

☐ Chicken Burger
☒ Beef Burger 2
☐ Shwarma
☒ Ice Tea 2
☐ Sandwich
☐ Club Sandwich

Total

****Cashless Transaction & Vouchers****

Id : 001

Voucher : awamileague

Proceed

****Receipt****

-----RECEIPT-----

DESCRIPTION	QUANTITY	PRICE
Beef Burger	2	220
Ice Tea	2	50
Total Amount:		270.0
Pay:		256.5

Cashless transaction successfully completed.

Receipt Printed

-----Thank You-----

Refresh Print Inventory

The last packet sent successfully to the server was 0 milliseconds ago. The driver has not received any packets from the server.

Inventory

We can get access of the inventory from Canteen window. We have integrated Date and Time in inventory. Using JTabbedPane, we have integrated five JPanel. Customer Information, Employee Information, Purchase Request, Voucher and Records. All of them are written in *Inventory* class.

Date and Time: We have integrated a clock inside inventory which shows the current date and time. We use java thread and sleep(); for taking current time and date continuously.

- **Contribution:** Clock is integrated by Akmam Hasan.

Customer Information Panel: This feature will create individual file for each customer. Those files contain balance. And customer can use that balance to pay their canteen bills. There is a recharge option also. Customer can recharge from this panel which can add balance inside the desired file.

Customer name, and customer Id will save inside database table named *customer*.

The screenshot displays a Java Swing window titled "Inventory Management". On the left is a red sidebar with a clock showing "3:2:43" and the date "4/5/2020". The main area has a tabbed interface with tabs for "Customer Information", "Employee Information", "Purchase Request", "Voucher", and "Records". The "Customer Information" tab is active and is split into two panels. The left panel, titled "Create New Customer", contains three input fields labeled "Enter Name", "Enter Id", and "Enter Amount", with a "Create" button at the bottom. The right panel, titled "Recharge Balance", contains two input fields labeled "ID" and "Amount", and a "Recharge" button at the bottom.

- **Contribution:** Customer Id, name adding in database table done by Rafi Majid. Design, create account using individual customer file, recharge account features done by Akmam Hasan.

Employee Information Panel: Employee information panel save employee name, Id, address, salary and image inside employee table of database. Attach button attach picture and Add button will add all the employee information and it will add the salary of the employee to show canteen cost inside records.

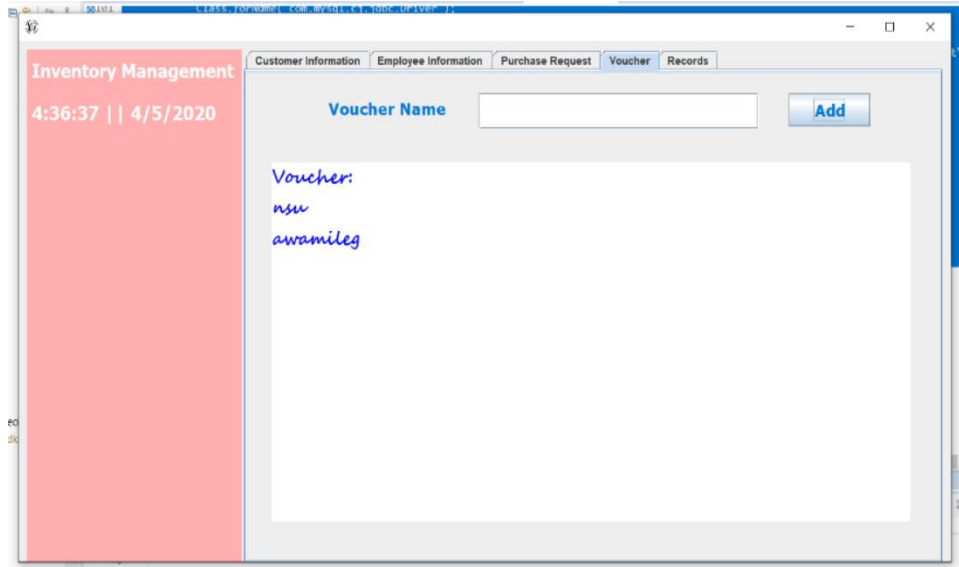
- **Contribution:** Database integration, image attach, **Add** button is done by Rafi Majid and design is done by Akmam Hasan.

Purchase Request Panel:

Purchase request will maintain the procurement of the canteen. It will add product name, quantity and amount inside database table named *purchase*. And Request button add the purchase amount with cost to show the canteen cost. And text area displays purchase information as well.

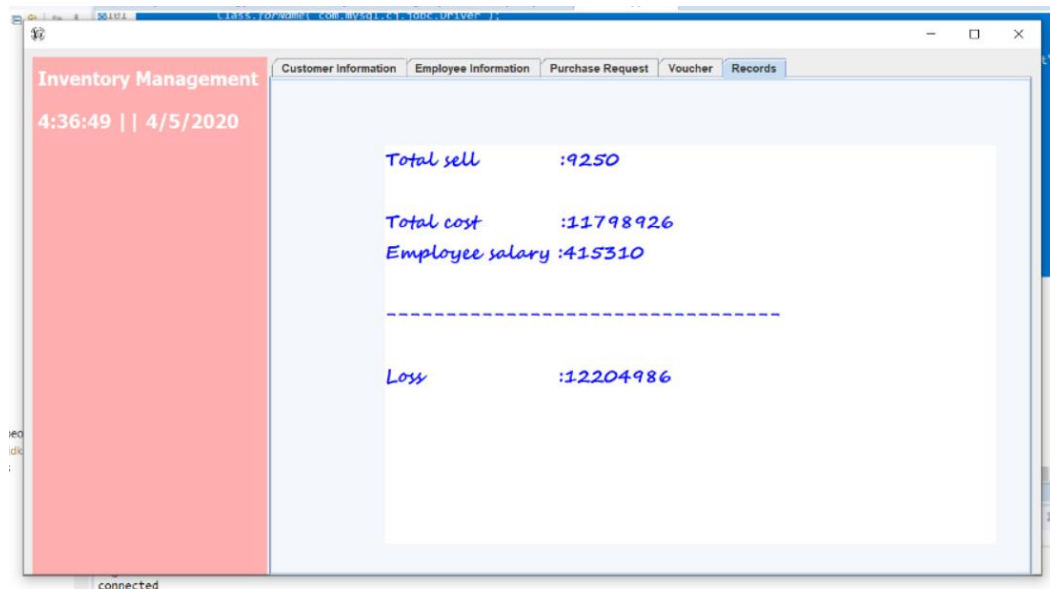
- **Contribution:** Database integration and Request button are done by Rafi Majid. Design is done by Akmam Hasan.

Voucher Panel: Voucher create a file named *voucher.txt* and save voucher name. Text Area displays the existing vouchers added in the file.



- **Contribution:** voucher file creation is done by Akmam Hasan.

Records panel: There is a Text Area in records. And it shows the total revenue and total cost (adding cost from purchase request and employee salary) . It also shows profit or loss of the canteen.



- **Contribution:** Design is done by Akmam Hasan. Database connectivity is done by Rafi Majid.

