



Office of the College of Informatics and Computing Sciences

Cashiering System of BSU Lipa Campus

A Project Implementation thru Console Application using C++ Programming

Language presented to the

College of Informatics and Computing Sciences

Batangas State University - Lipa

In Partial Fulfillment of the Requirements for the

Course: CS-131 Data Structures in Algorithms

By:

Group 1

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**Office of the College of Informatics and Computing Sciences****I. Topic:**

Cashiering Office

II. Title of the Project:

Cashiering System of BSU Lipa Campus

III. Purpose and Description:

The University's financial transactions are handled by the Cashier's Office. Its main goal is to gather and keep track of all payments made to the University and to ensure that all funds are deposited in a timely and accurate manner.

Additionally, the Cashier's Office is responsible for disbursing funds to customers and stakeholders as needed. With the aim of enhancing both the quality and quantity of services offered, this system is created to offer students and all other consumers of the University efficient and effective financial services.

IV. Scope of the Project:**a. User Login****I. Admin login**

An admin can access the admin interface by logging in to the system with their own credentials.

II. User login

Students and other clienteles will be able to access the user interface by logging into the system with their credentials.

b. Transaction



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I. Payment

Users will be able to make payments for various fees and charges using the system.

II. Deposit:

Users will be able to make deposits to their accounts using the system.

III. Receipt:

The user will receive a receipt. The student name, SR-code, charge, and discount percentage (if applicable) are all listed on the receipt.

c. Admin interface

I. Add

The admin will be able to add new students and fees to the system.

II. Update

The admin will be able to update student details and fees.

III. Delete

The admin will be able to delete student records and fees from the system.

IV. Search

The admin will have the ability to search for particular student records and fees.

d. User interface

I. Transaction





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Users will be able to examine their transaction history and send payments.

II. View

Users will be able to access their payment receipts as well as other crucial account information.

V. Console App Design

```
<> CodeChum Terminal

Cashiering System of BSU Lipa Campus

1. Login
2. Exit
Enter your choice: 1

=== LOGIN ===
1. Admin Login
2. User Login
3. Back to main menu
Enter your choice: 1

=== ADMIN LOGIN ===
Enter username: admin
Enter password: bsulipa
Login successful. Welcome, Admin!

=== ADMIN INTERFACE ===
a. Add
b. Update
c. Delete
d. Search
e. Back to login
Enter your choice: a
```

```
Enter your choice: a

=== Adding Item ===
Enter student name (or 'c' to cancel): Carandang JohnHoward
Enter SR code: 22-6543
Enter tuition fee: 5000
Enter discount percent: 50
Item added successfully.

=== ADMIN INTERFACE ===
a. Add
b. Update
c. Delete
d. Search
e. Back to login
Enter your choice: e

=== LOGIN ===
1. Admin Login
2. User Login
3. Back to main menu
Enter your choice: 2
```

```
Enter your choice: 2

=== USER LOGIN ===
Enter username: user
Enter password: batstateU
Login successful. Welcome, User!

=== USER INTERFACE ===
Transaction
a. Payment
b. View
c. Back to login
Enter your choice: a

===STUDENT PAYMENT===
Enter Student name: Carandang John Howard
Enter Sr-code: 22-6543
Enter tuition fee: 5000
Enter discount percent: 50
```

```
=====
                        Republic of the Philippines
                        Batangas State University Batangas
                        STUDENT RECEIPT
=====

Student Name: Carandang John Howard
School registration code: 22-6543
Tuition Fee: Php 5000
Discount Percent: 50%
Total Amount: Php 2500
=====

Cashiering System of BSU Lipa Campus

1. Login
2. Exit
Enter your choice: 1

=== LOGIN ===
1. Admin Login
2. User Login
3. Back to main menu
Enter your choice: 1
```





```
== ADMIN LOGIN ==  
Enter username: admin  
Enter password: bsulipa  
Login successful. Welcome, Admin!  
  
== ADMIN INTERFACE ==  
a. Add  
b. Update  
c. Delete  
d. Search  
e. Back to login  
Enter your choice: d  
  
== Searching Item ==  
Enter SR code to search: 22-6543  
Student Name: Carandang JohnHoward  
SR code: 22-6543  
Tuition Fee: 5000  
Discount Percent: 50%
```

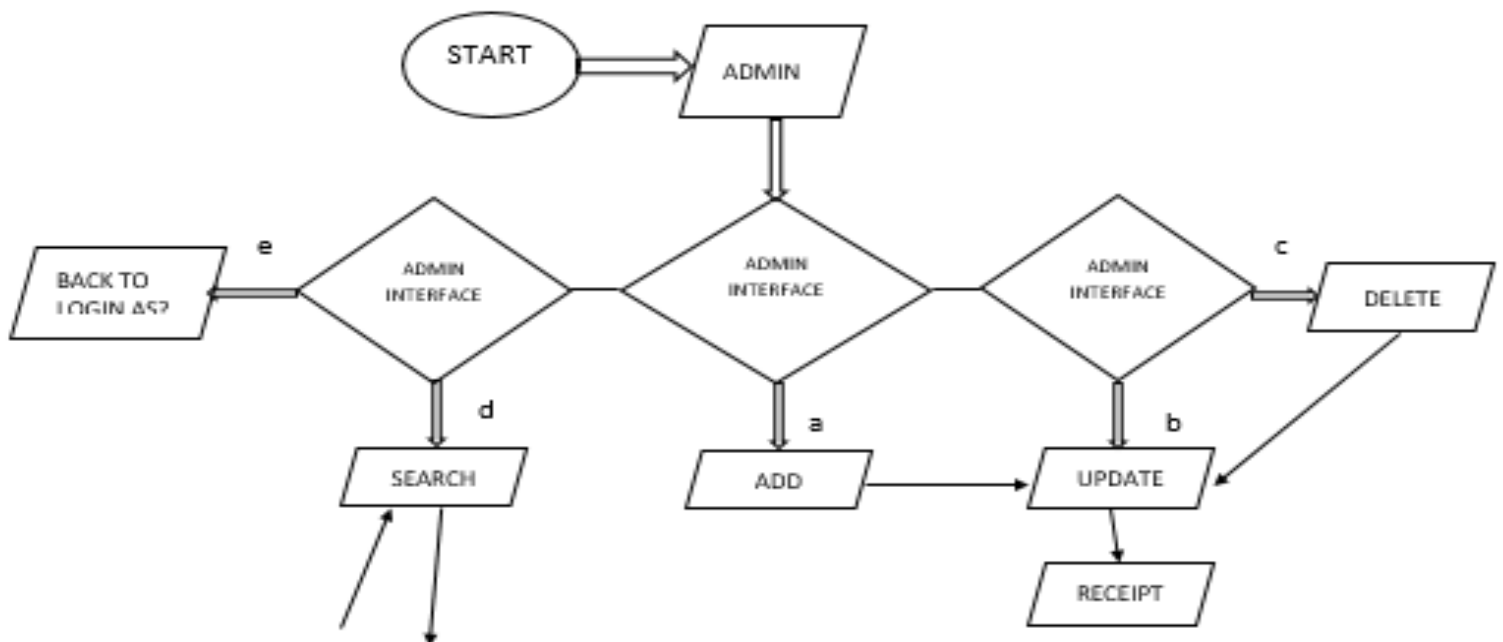
```
== ADMIN INTERFACE ==  
a. Add  
b. Update  
c. Delete  
d. Search  
e. Back to login  
Enter your choice: e  
  
== LOGIN ==  
1. Admin Login  
2. User Login  
3. Back to main menu  
Enter your choice: 3  
  
Cashiering System of BSU Lipa Campus  
  
1. Login  
2. Exit  
Enter your choice: 2  
Exiting program...  
  
>>> Program Terminated
```

VI. Flowchart and Procedures

a. Flowchart

I. Admin

ADMIN INTERFACE

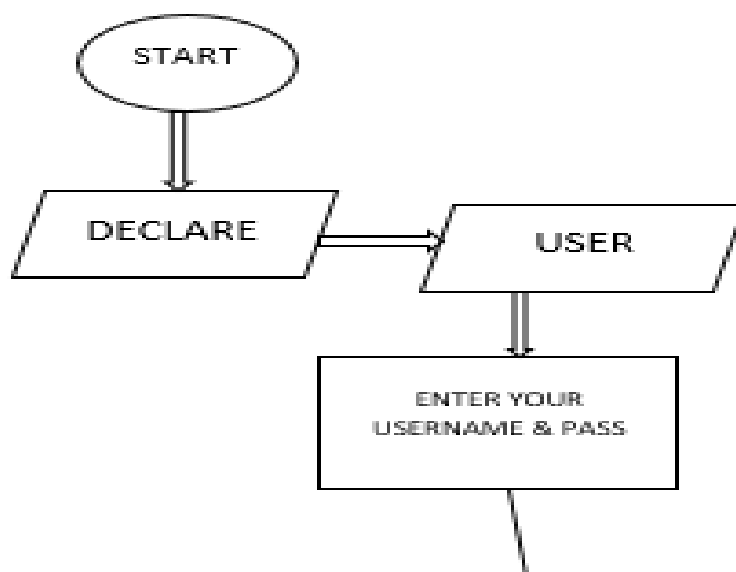




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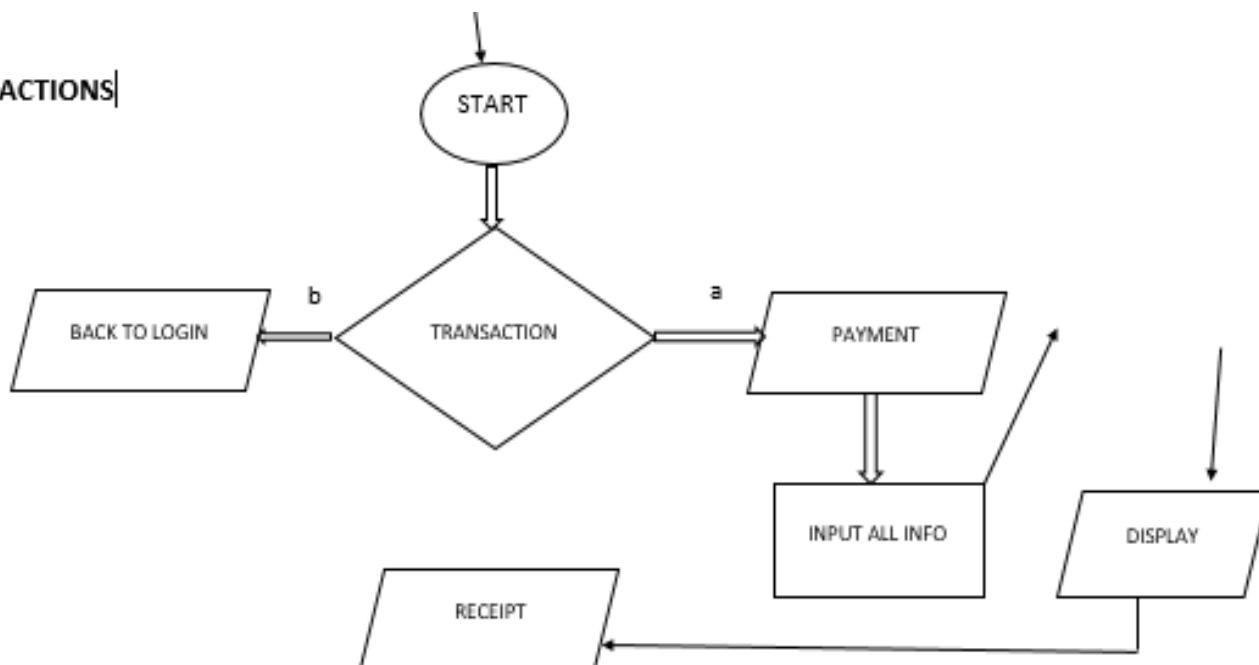
II. User

USER INTERFACE



III. Transaction

TRANSACTIONS

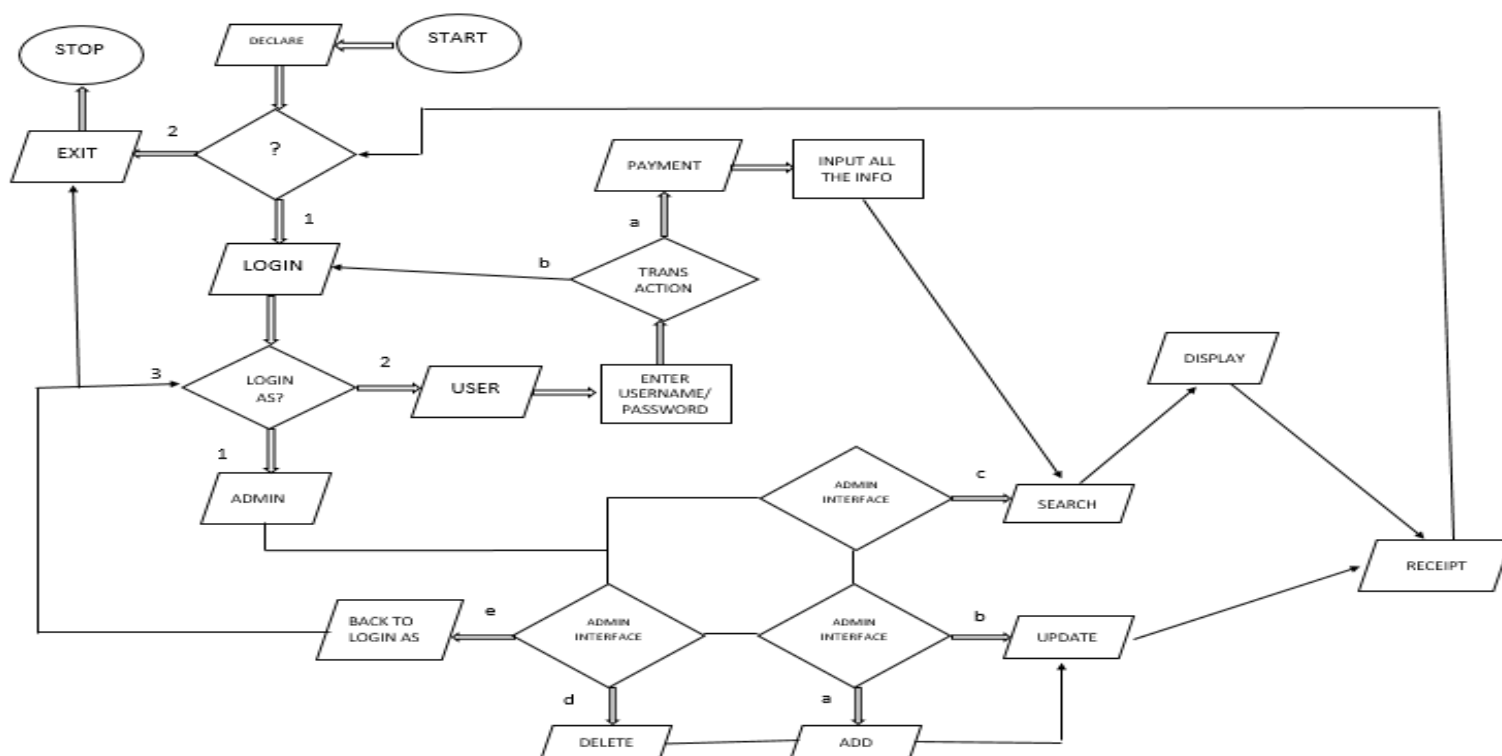




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IV. Whole process of the system

WHOLE PROCESS FLOWCHART



b. Procedures

I. Admin

- * Start the Program
- * Login as Admin (1)
- * Choose whether you Add (a), Update (b), Delete (c), Search (d) or Back to login as (e);
- * When you Add or Delete something, it will Update,
- * Then display as the Receipt
- * Stop the Program





II. User

- * Start the Program
- * Declare variables
- * Login as User (2)
- * Input all the information
- * Stop the Program

III. Transaction

- * Start the program
- * If your choose Payment (a), proceed to input all the information;
- * The admin will search your given name, then display all the needed information.
- * Display as the Receipt
- * Stop the Program

IV. Whole process of the system

- * Start the program
- * Declare variables
- * Decide whether you login (1) or exit (2)
- * If you choose 1, then you will decide again whether you login as Admin (1) or User (2)





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- * If you login as User (2), you are required to enter your Username and Password given by the university
- * Proceed to transaction, choose whether Payment(a) or Back to Login (b).
- * If you choose Payment (a), you will proceed to input all the informations
- *The admin will search your info, then;
- * Display your needed information
- * Else you choose Back to Login (b)
- *Then it will run again
- * Else you choose to login as Admin (1), you will have the authority to Add (a), Update (b), Delete (c), Search (d) and Back to login as (e).
- * If you Add (a) and Delete (c) , the info's will update
- * Display as the receipt
- * Print the results
- * Stop the Program

VII. Source Codes

- a. See the attached cpp file on the Google classroom.

