

# ***“Transaction Tracking System for Small Business Owners”***

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Work done	Contributions
1. Introduction	ALL
2. Revised Introduction	Bal, Canoy
3. Objectives	Bal, Bandigan, Canoy
4. Brainstorming	ALL
5. Draft of Code	Pabalan,Bandigan

## **Introduction**

Small business owners mostly rely on notebooks, especially the older generations to record their sales, payments, and inventory. These are the traditional ways but are time consuming and inefficient. As the business grows it will have more sales and payments to track making it more difficult to do.

Our plan of action is to deal with the difficulty of tracking the sales, payments, and inventory using the traditional method because they lack access or knowledge to use digital tools. Many small business owners do not use accounting systems because of their high cost and its complex system. Moreover, manual sales computation and inventory tracking is prone to human error and miscalculations leading to product shortages/overstocking and can affect the store's income (Wynn & Kuhn, 2021; Gestisoft, 2023; Retalon, 2025).

To address this problem, our team would like to propose a Transaction Tracking System and Management System that will simplify sales, payment, and inventory tracking for business owners. Instead of relying on hand written notebooks our system will allow users to input transaction details digitally. And it will automatically generate an organized receipt that can be viewed or printed using notepad.

## **The Project**

<Discuss how the project works THOROUGHLY>

## **Objectives**

The objective of this project is to develop a computer tracking system for sales, payments and inventory that can be easily used without access or knowledge of technical tools. Specifically the project aims to:

1. Develop a system that:
  - a. Provides secure access through a cashier login feature.
  - b. Create a user-friendly C++ system that automates product transactions.
  - c. Automatically updates the inventory after each transaction.
  - d. Generates a receipt after each transaction.
2. Test and evaluate the system's accuracy.

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```
#include <iostream>
#include <string>
#include <iomanip>

using namespace std;

int globalVar;

struct Product{
    string name;
    float price;
    int quantity;
};

void productAdd();
void productUpdate();
void deleteProduct();
void viewInventory();

bool login (){
    string username, password;

    const int cashierAccount = 4;
    string correctUser[cashierAccount] = {"hanz", "kevin", "hail", "christian"};
    string correctPass [cashierAccount] = {"123", "234", "345", "456"};

    cout<<"====LOGIN====\n";
    cout<<"username: ";
    cin>>username;
    cout<<"password: ";
    cin>>password;

    for(int i = 0; i < cashierAccount; i++){
        if (username == correctUser[i] && password == correctPass[i]) {
            cout << "\nLogin successful! Welcome, " << username << ".\n";
            return true;
        }
    }
    cout<<"\nInvalid username or password.\n";
    return false;
}
```

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```
int main(){
    if (!login()) {
        cout << "\nAccess Denied. Exiting program...\n";
        return 0;
    }

    const int size = 100;
    int choice, count;
    Product inventory[size];

    cout << "=====Inventory===== \n";
    cout << "1.Add a product \n";
    cout << "2.Update a Product \n";
    cout << "3.Delete a Product \n";
    cout << "4.View Inventory \n";
    cout << "5.Exit \n";
    cin >> choice;
    while(choice !=5){
        switch(choice){
            case 1:
                productAdd();
                globalVar++;
                break;
            case 4:
                viewInventory();
                break;
        }
        cout << " \n";
        cout << "=====Inventory===== \n";
        cout << "1.Add a product \n";
        cout << "2.Update a Product \n";
        cout << "3.Delete a Product \n";
        cout << "4.View Inventory \n";
        cout << "5.Exit \n";
        cin >> choice;
    }

    return 0;
}

void productAdd(){
    const int size = 100;
```

And more.....