

```
/* Serendipity Book Sellers Part 4
File Name:MainMenu.cpp
Programmer: Chris Adkins
Date Last Modified: 10/9/2019
CS 150 - Thursday 5:30PM
```

Problem Statement:

This program displays a main menu with the ability to show several other sub menus. As of right now there is some small logic used in order to allow the user to see every different menu but no functionality beyond that has been implemented yet. I have also added some input validation to check to see if the user enters a number outside the given parameters.

Overall Plan:

1. Display the main menu to the user.
2. Check the users input to determine what to show next.
3. Display the proper menu in regards to the user's input.

```
*/

#include <iostream>
#include <iomanip>
#include <string>
using namespace std;

int main() {

    int choice; // This value is set by the user when prompted.
    int numBooks;
    string date; // MM/DD/YY
    string isbn;
    string bookTitle;
    float bookPrice;
    float total;
    float taxPaid;
    float subTotal;
    float taxRate = .1;

    cout << "Serendipity Booksellers\nMain Menu\n\n";
    cout << "1. Cashier Module\n";
    cout << "2. Inventory Database Module\n";
    cout << "3. Report Module\n";
    cout << "4. Book Information\n";
    cout << "5. Exit\n\n";
    cout << "Enter your choice: ";
    cin >> choice;
    if (choice < 1 || choice > 4) {
        cout << "\nPlease enter a number between 1 - 4.";
    }

    switch (choice) {
        case 1: { // Main Menu
            cout << "\nPlease Enter The Date (MM/DD/YY): ";
            cin >> date;
            cout << "\nEnter the Title of the Book: ";
            cin.ignore();
```

```

getline(cin, bookTitle);
cout << "\nEnter ISBN of the Book: ";
cin >> isbn;
cout << "\nHow many copies of the book will you be buying?: ";
cin >> numBooks;
cout << "\nHow much does the book cost?: $";
cin >> bookPrice;

subTotal = numBooks * bookPrice;
taxPaid = subTotal * taxRate;
total = subTotal + taxPaid;

cout << "\nSerendipity Booksellers\n\n " << date;
cout << "\n\nQty\tISBN\t\tTitle\t\tPrice\tTotal";
cout << fixed;
cout << "\n\n" << numBooks << "\t" << isbn << "\t\t"
<< bookTitle << "\t$" << setprecision(2) << bookPrice
<< "\t$" << setprecision(2) << total;
cout << "\n\n\n\t\tSubtotal \t$" << setprecision(2) << subTotal;
cout << "\n\t\tTax \t$" << setprecision(2) << taxPaid;
cout << "\n\t\tTotal \t$" << setprecision(2) << total;
cout << "\n\nThank You For Shopping Serendipity!";
break;
}
case 2: {
    cout << "\nSerendipity Booksellers\nInventory Database";
    cout << "\n\n1. Look-Up a Book\n2. Add a Book";
    cout << "\n3. Edit a Book's Record\n4. Delete a Book";
    cout << "\n5. Return to the Main Menu\n\nEnter Your Choice: ";
    cin >> choice;
    if (choice < 1 || choice > 5) {
        cout << "\nPlease enter a number between 1 - 5.";
    } else {
        cout << "\nYou selected item " << choice;
    }
    break;
}
case 3: {
    cout << "\nSerendipity Booksellers\nReports";
    cout << "\n\n1. Inventory Listing\n2. Inventory Wholesale Value";
    cout << "\n3. Inventory Retail Value\n4. Listing by Quantity";
    cout << "\n5. Listing by Cost\n6. Listing by Age\n7. Return to Main Menu";
    cout << "\n\nEnter your choice";
    cin >> choice;
    if (choice < 1 || choice > 7) {
        cout << "\nPlease enter a number between 1 - 7.";
    } else {
        cout << "\nYou selected item " << choice;
    }
    break;
}
case 4: {
    cout << "\nSerendipity Booksellers\nBook Information";
    cout << "\nISBN: \nTitle: \nAuthor: \nPublisher: \nDate Added: ";
    cout << "\nQuantity On Hand: \nWholesale Cost: \nRetail Price: ";
    break;
}
default: {
    cout << "\nInvalid Input";
}
}

```

}

Output

Input Validation on Main Menu

Serendipity Booksellers
Main Menu

1. Cashier Module
2. Inventory Database Module
3. Report Module
4. Book Information
5. Exit

Enter your choice: 6

Please enter a number between 1 - 5. You selected item 3

Input Validation in Inventory

Serendipity Booksellers
Inventory Database

1. Look-Up a Book
2. Add a Book
3. Edit a Book's Record
4. Delete a Book
5. Return to the Main Menu

Enter Your Choice: 3

Input Validation in Reports

Serendipity Booksellers
Reports

1. Inventory Listing
2. Inventory Wholesale Value
3. Inventory Retail Value
4. Listing by Quantity
5. Listing by Cost
6. Listing by Age
7. Return to Main Menu

Enter your choice: 5

You selected item 5