

CSCE 2004 – Programming Foundations I

Homework Two Report

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Academic Integrity Statement: I pledge that I have neither given nor received unauthorized help on this programming assignment.

The goal of this programming assignment was to create a menu-driven program that allows users to select a book genre and format, then calculates the price based on the selections. The program needed to handle four genres: Fiction, Non-Fiction, Science Fiction, and History. Additionally, the user could choose between a paperback or hardcopy format. The program also required basic error handling to ensure valid inputs were provided. The design incorporated if-else statements to validate user input and a switch statement to determine pricing based on genre and format.

The program starts by displaying a menu with four book genres, each assigned a number. The user is prompted to select a genre by entering the corresponding number. An if-else statement is used to check whether the input is valid. Next, the user is prompted to choose between paperback or hardcopy format, with another if-else block ensuring that only valid choices are accepted. Once both selections are made, the program uses a switch statement to determine the book's price based on the chosen genre and format. The final output displays the selected genre, format, and the corresponding price. If invalid input is detected at any stage, the program informs the user and terminates early.

```
What genre do you want: 1
Would you like a hard copy or a paper copy (Type P/p for paperback and H/h for hardcopy): j
We don't have that format
```

Testing incorrect input of format (not P/p or H/h)

```
What genre do you want: 5
Sorry we don't carry that genre
```

Testing incorrect genre input (not between 1-4)

```
What genre do you want: 4
Would you like a hard copy or a paper copy (Type P/p for paperback and H/h for hardcopy): p
You selected history with a paperback cover, you owe: $14
```

Testing for correct input of a history book with a paper copy

This assignment reinforced the importance of structuring conditional logic effectively using if-else and switch statements. I learned how to implement input validation to prevent incorrect selections from causing unexpected behavior. It took me about 1 hour to the project.