

UCS 1211 Mini Project Report

Ex No : Date: 25.04.2019	MINI PROJECT
Title	Publisher Management System
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Team Members	Suraj Jain(185001177) Susmithaa Raam(185001181) Vishal.N(185001198)

Abstract

The Publishing Management System is an efficient application to handle books from multiple branches. With large number of consumers buying books, the goal of the mini project was to develop a simple software to monitor stock and purchase of books from multiple accounts and keep track of overall transactions.

The publishing management system involves customer registration, purchase of books ,stock updation , etc . The project was developed using C making it easily portable over modern platforms like Windows, Ubuntu etc. while keeping the size of the application relatively small. These features improve the overall efficiency and portability of the software.

Project Description

This Mini Project uses C compiled using GCC to create a simple system to handle books and stock. It allows the user to purchase books and initially stores them in structures and using files, store this data for later reference and updates. The 4 team members each took a specific approach to this project .

The code was compiled using header files. The final code was able to efficiently handle stock, customer registration , royalty calculation , customer purchase portal etc.

Salient Features

- Customer purchase portal to buy books from multiple branches
- Overall stock maintenance in the various branches and head office
- Author royalty calculation and book royalty calculation
- Bestselling book
- Highest revenue generating branch
- Overall turnover of the head office
- Customer Record Management

Outline

- Begin
 1. Begin
 2. Display the menu of the features to use :
 - a) Stock updating for head office
 - b) Branches purchasing platform
 - c) Customer registration
 - d) Display Authorlist
 - e) Find bestseller book
 - f) Releasing new book to market
 - g) Display details of book/stock in head office
 - h) Display branch 1 stock
 - i) Display branch 2 stock
 - j) Display branch 3 stock
 - k) Customer purchase portal
 - l) Display particular customer record

- m) Display all customer records
- n) Highest revenue generating branch
- o) Calculate royalty of books in HO
- p) Royalty of authors
- q) Overall turnover
- r) Reset all files
- s) Exit

3. Stock updation : Increase and decrease the amount of books in the head office and update the file
4. Branch purchases : Handle the buying of books by different branches from the head office and updating the file
5. Customer registration : Creating an account for the customer to purchase books
6. Display authorlist : Display all the authors who have written various books
7. Find bestseller book : To find the best selling book based on the number of purchases and stock left
8. Releasing new book to market: Displays all the new books which have come to the market
9. Details of book/stock in HO : Displays the books and stock left in the head office
10. Branch 1,,2,3 stock : Displays the stock in any of the three branches based on your choice
11. Customer purchase portal: Customer logs in to his account first . He can then purchase various books from multiple branches based on availability . The customer can also check his purchase history and find out the books he has already bought
12. Display customer records : To display a particular record of a customer or display all customer records based on the users choice
13. Highest revenue generating branch : To calculate and find out the branch which has generated maximum revenue by selling most number of books
14. Royalty of authors : Calculates royalty of each authors based on royalty percentage of the author and displays the same
15. Overall turnover : Total turnover of the head office is displayed
16. Reset all files : Resets all the files to its initial state

- If they choose to exit , exit out of the program
- End

Output Snapshots

19.exit!
Enter your choice:7

title	author	genre	isbn	pages	royalty	stock	copies	edition	price
harry potter-chamber of secrets	jk rowling	fiction	600001	300	100	500	1000	1	150.000000
harry potter-goblet of fire	jk rowling	fiction	600002	350	100	600	2000	1	150.000000
harry potter-order of phoenix	jk rowling	fiction	600003	400	100	700	2000	1	150.000000
le petit prince	antoine	fiction	600004	700	100	500	1000	1	180.000000
the hobbit	jrr tolkien	fiction	600005	450	100	500	1000	1	800.000000
lord of rings	jrr tolkien	fiction	600006	900	100	500	1000	1	120.000000
she	hrider	fiction	600007	400	100	500	2000	1	350.000000
lion	cslewis	fiction	600008	300	100	400	3000	1	1000.000000
da vinci code	dan brown	fiction	600009	300	100	600	4000	1	600.000000
alchemist	paulo coelho	science fiction	600010	300	100	500	1000	1	700.000000
mirror	paulo coelho	fiction	600011	300	100	500	1000	1	430.000000
invisible man	hrider	fiction	600012	300	100	500	1000	1	210.000000
lolita	vladimir	fiction	600013	300	100	200	1000	1	900.000000
common sense	johanna	fiction	600014	300	100	500	1000	1	450.000000
one indian girl	chetan bhagat	fiction	600015	300	100	500	1500	1	190.000000
mixed demolitions	dan brown	fiction	600016	300	100	500	1000	1	210.000000
revolution	chetan bhagat	fiction	600017	300	100	500	1000	1	210.000000
play with math	rd sharma	reference	600018	300	100	500	1020	1	310.000000
play with physics	sl arora	reference	600019	300	100	500	1200	1	310.000000
coding in c	reema thareja	reference	600020	300	100	100	1300	1	410.000000
aremon	vladimir	fiction	600021	300	100	400	1400	1	210.000000
concepts of physics	hc verma	reference	600022	300	100	500	1500	1	310.000000
nights of life	susritha verma	fiction	600023	300	100	700	1050	1	210.000000

PUBLISHER MANAGEMENT SYSTEM
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- 1 . Stock Updating for Head Office
- 2 . Branches Purchasing Platform
- 3 . Customer Registration
- 4 . Display Authorlist
- 5 . Find bestseller book
- 6 . Releasing new book to market
- 7 . Display details of book/stock in head office
- 8 . Display branch 1 stock
- 9 . Display branch 2 stock
10. Display branch 3 stock
11. Customer Purchase portal
12. Display particular Customer Records
13. Display all Customer Records
14. Highest Revenue generating branch
15. Calculate Royalty of books in HO
16. Royalty of Authors
17. Overall turnover
18. Reset all files
- 19.exit!

Enter your choice:1

enter the quantity of each book:

|                                 |    |
|---------------------------------|----|
| harry potter-chamber of secrets | :5 |
| harry potter-goblet of fire     | :5 |
| harry potter-order of phoenix   | :5 |
| le petit prince                 | :5 |
| the hobbit                      | :5 |
| lord of rings                   | :5 |
| she                             | :5 |
| lion                            | :5 |
| da vinci code                   | :5 |
| alchemist                       | :5 |
| mirror                          | :5 |
| invisible man                   | :5 |
| lolita                          | :5 |
| common sense                    | :5 |
| one indian girl                 | :5 |
| mixed demolitions               | :5 |
| revolution                      | :5 |
| play with math                  | :0 |
| play with physics               | :0 |
| coding in c                     | :0 |
| aremon                          | :0 |
| concepts of physics             | :0 |
| nights of life                  | :0 |
| experiences sold                | :0 |

19.EXIT!  
Enter your choice:8

| title                           | author      | genre   | isbn   | pages | royalty | stock | copies | edition | price      |
|---------------------------------|-------------|---------|--------|-------|---------|-------|--------|---------|------------|
| harry potter-chamber of secrets | jk rowling  | fiction | 600001 | 300   | 100     | 500   | 100    | 1       | 150.000000 |
| harry potter-goblet of fire     | jk rowling  | fiction | 600002 | 350   | 100     | 600   | 200    | 1       | 150.000000 |
| harry potter-order of phoenix   | jk rowling  | fiction | 600003 | 400   | 100     | 700   | 200    | 1       | 150.000000 |
| le petit prince                 | antoine     | fiction | 600004 | 700   | 100     | 500   | 100    | 1       | 180.000000 |
| the hobbit                      | jrr tolkien | fiction | 600005 | 450   | 100     | 500   | 100    | 1       | 800.000000 |
| lord of rings                   | jrr tolkien | fiction | 600006 | 900   | 100     | 500   | 100    | 1       | 120.000000 |

Enter your choice:2

Enter from which branch you are(1/2/3):1

enter the isbn of book you want to purchase:600006

enter the no of copies you want:10

Enter your choice:3

enter name:sooraj

enter address:456 vgp nagar

enter id:45

enter phone no:9876

enter password:sooraj

Enter your choice:4

name:jk rowling      noofbooks:3      royalty:10  
book1:harry potter-chamber of secrets  
book2:harry potter-goblet of fire  
book3:harry potter-order of phoenix

name:antoine      noofbooks:1      royalty:5  
book1:le petit prince

name:jrr tolkien      noofbooks:1      royalty:5  
book1:the hobbit

name:hrider      noofbooks:2      royalty:4  
book1:she  
book2:invisible man

name:cslewis      noofbooks:1      royalty:6  
book1:lion

name:dan brown      noofbooks:2      royalty:10  
book1:da vinci code  
book2:mixed demolitions

name:paulo coelho      noofbooks:2      royalty:7  
book1:alchemist  
book2:mirror

Enter your choice:5

da vinci code is bestseller

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Enter your choice:6
enter title,author,genre,ISBN,pages,stock,edition,price:
le gravitas
v bignesh
science fiction
600026
500
200
1
600

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19.exit!
Enter your choice:11

enter name:sooraj
enter password:sooraj

login successful!!!
Book list:

      title              author          genre          isbn    price
harry potter-chamber of secrets  jk rowling      fiction          600001    150.000000
harry potter-goblet of fire      jk rowling      fiction          600002    150.000000
harry potter-order of phoenix    jk rowling      fiction          600003    150.000000
le petit prince                  antoine         fiction          600004    180.000000
the hobbit                       jrr tolkien    fiction          600005    800.000000
lord of rings                    jrr tolkien    fiction          600006    120.000000
she                              hrider          fiction          600007    350.000000
lion                             cslewis         fiction          600008    1000.000000
da vinci code                   dan brown       fiction          600009    600.000000
alchemist                       paulo coelho    science fiction  600010    700.000000
mirror                          paulo coelho    fiction          600011    430.000000
invisible man                    hrider          fiction          600012    210.000000
lolita                          vladimir       fiction          600013    900.000000
common sense                     johanna         fiction          600014    450.000000
one indian girl                  chetan bhagat   fiction          600015    190.000000
mixed demolitions                dan brown       fiction          600016    210.000000
revolution                       chetan bhagat   fiction          600017    210.000000
play with math                   rd sharma       reference        600018    310.000000
play with physics                sl arora        reference        600019    310.000000
coding in c                      reema thareja   reference        600020    410.000000
aremon                          vladimir       fiction          600021    210.000000
concepts of physics              hc verma        reference        600022    310.000000
nights of life                   susritha verma  fiction          600023    210.000000
experiences sold                 bishal raj      fiction          600024    210.000000
morals extended                  v bignesh       fiction          600025    210.000000
le gravitas                      v bignesh       science fiction  600026    600.000000
enter the isbn of the book you want to purchase:600010

enter no of books you want20

enter the branch from where you should get your book:2

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Enter your choice:12

enter name:sooraj
enter password:sooraj

Name:sooraj
Address:456 vgp nagar
Phone:9876
Books              quantity
alchemist          20

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15:EXIT:  
Enter your choice:13

enter name:  
admin

enter password:admin

Name:vignesh  
Address:mogappair 24  
Phone:98411  
No purchase records found

Name:susmithaa  
Address:virugambakkam 13  
Phone:87545  
No purchase records found

Name:suraj  
Address:nungambakkam 17  
Phone:10987  
No purchase records found

Name:vishal  
Address:nungambakkam 34  
Phone:73387  
No purchase records found

Name:srihari  
Address:nungambakkam 14  
Phone:87423  
No purchase records found

Name:prasanna  
Address:nungambakkam 7  
Phone:87544  
No purchase records found

Name:sooraj  
Address:456 vgp nagar  
Phone:9876

| Books     | quantity |
|-----------|----------|
| alchemist | 20       |

15:EXIT:  
Enter your choice:14

Branch 2 is the highest revenue generating branch

15:EXIT:  
Enter your choice:16

| Author name    | Royalty |
|----------------|---------|
| jk rowling     | 75000   |
| antoine        | 9000    |
| jrr tolkien    | 46060   |
| hrider         | 36400   |
| cslewis        | 180000  |
| dan brown      | 261000  |
| paulo coelho   | 79100   |
| vladimir       | 59700   |
| johanna        | 31500   |
| chetan bhagat  | 39600   |
| rd sharma      | 15810   |
| sl arora       | 22320   |
| reema thareja  | 26650   |
| hc verma       | 69750   |
| susritha verma | 22050   |
| bishal raj     | 21525   |
| v bignesh      | 29190   |

# Learning Experience

- This mini project was a combination of conditionals, looping constructs, arrays, structures, pointers, files and pointers and also some advanced concepts.
- Applying the concept of files to store and retrieve data safely was the first challenge we faced as there were inconsistencies in certain file modes.
- Being a team leader for this mini project was challenging as I had to correlate code from 3 other members and ensure that the code ran perfectly.
- Writing code incrementally helped as this was a relatively large program with a large number of functions to be properly linked and executed.
- However, with proper communication between my team mates and a lot of research online, we were able to clear all the bugs involved and arrive at a working sample.
- Overall, this mini project has strengthened our coding skills (especially with files) and helped us develop our team work and leadership skills needed to solve real-world problems.