

Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
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Book Store Management System

MINI PROJECT USING DATA STRUCTURES AND OPERATING SYSTEM

(18MCA26)

REPORT

Submitted by

Ram Biswarup Roy
1NZ19MCA18

In partial fulfillment for the award of the degree of

MASTER OF COMPUTER APPLICATIONS

2019-2020

Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
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DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

CERTIFICATE

This is to certify that Ram Biswarup Roy, bearing USN 1NZ19MCA18 has successfully completed his/her second semester mini project work entitled Book Store Management System as a partial fulfillment of the requirements for the award of MASTER OF COMPUTER APPLICATIONS degree, during the Academic Year 2019-20 under my supervision. This report has not been submitted to any other Organization/University for any award of degree.

Signature of the Guide

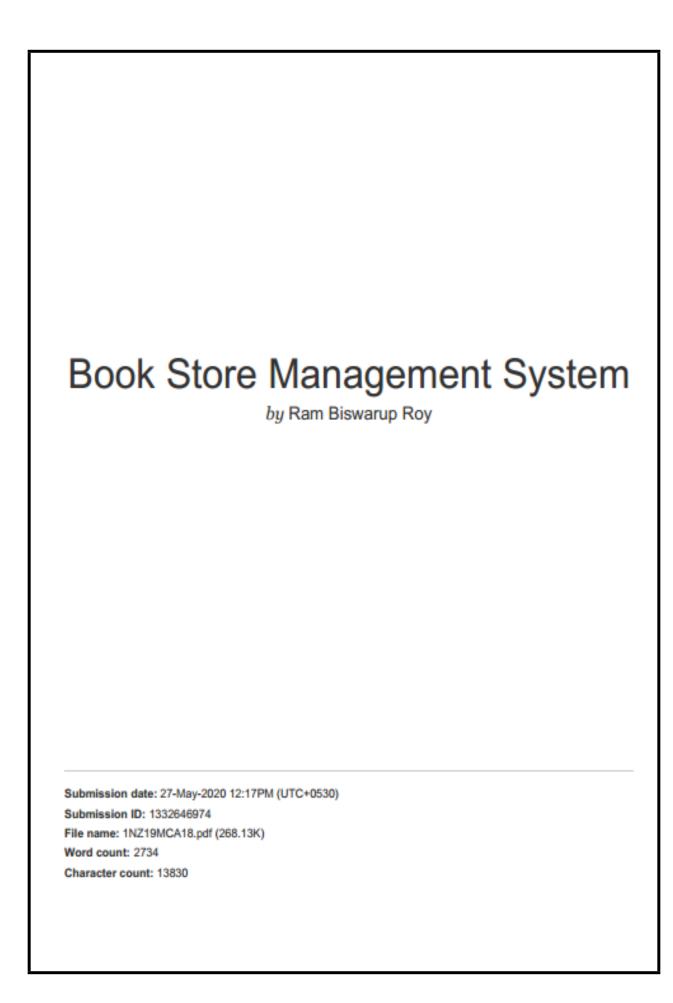
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Internal Examiner

External Examiner

Date:



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SIMILARITY INDEX

INTERNET SOURCES

PUBLICATIONS

STUDENT PAPERS

PRIMARY SOURCES

Lewis, . "Transforming Requirements to Testable Test Cases", Software Testing and Continuous Quality Improvement Third Edition, 2008.

1%

Publication

2

Gerard O'Regan. "Giants of Computing", Springer Science and Business Media LLC, 2013

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Publication

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DECLARATION

I, Ram Biswarup Roy, student of II Semester MCA, bearing USN 1NZ19MCA18 hereby declare that the project work entitled "Book Store Management System" has been carried out by me under the supervision of Internal Guide Mrs. Jincy C Mathew, Assistant Professor and submitted in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications by Department of Master of Computer Applications, New Horizon College of Engineering, an Autonomous Institution, Affiliated to Visvesvaraya Technological University during the academic year 2019-20. This report has not been submitted to any other Organization/University for any award of degree.

Name: Ram Biswarup Roy

Ram Biswarp Pay

Signature:

Date: 28/05/2020

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ABSTRACT

This project automates the traditional purchasing of books. Since in traditional purchasing of books, it is difficult to keep record of available books for sale and purchase with the customer, this project makes purchasing of books online by reserving books for customer online which automatically keeps track of available books for each book.

There are basically two types of users that can be created-

- Administrator This user has access to add a new book, update and view an existing book details. This user can also check the total valuation and as well as profit of a particular book. To access admin page this user need to enter a four digit password. By default it will be "1234".
- 2 Staff This user has limited access to the system. This type of user mainly includes users who can perform all operations except the Admin specific operations. User's most commonly performed action is to book a book and also sell the book with the price set by admin. This user can generate the bill. The bill will be automatically update into the book details.

INTRODUCTION

1.1 GENERAL INTRODUCTION

Aim of this project is to make purchasing of books online. In traditional purchasing of book it is difficult to keep record of available books for selling books to a customer .So the purpose of this purchasing of books is to make the work of seller and company books easier by keeping record of available books of different subjects & authors and provide details of the books to customers in a quick manner. This website also provides facility to the user for maintaining and managing stock of books. Staff can calculate bill using this program and also the total sales values automatically updated into the database.

1.2 PROJECT DESCRIPTION

This project automates the traditional purchasing of books. Since in traditional purchasing of books, it is difficult to keep record of available books for sale and purchase with the customer, this project makes purchasing of books online by reserving books for customer online which automatically keeps track of available books for each book.

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- Staff This user has limited access to the system. This type of user mainly includes users
 who can perform all operations except the Admin specific operations. User's most
 commonly performed action is to book a book and also sell the book with the price set

by admin. This user can generate the bill. The bill will be automatically update into the book details.

1.3 EXISTING SYSTEM

- 1. Our objective is to offer a platform where a book store manager as well as staff can record their entry..
- 2. Our objectives is to show any book available in stock by the manager easily.
- 3. Our objectives is to calculate the bill amount by the staff without entering the price of the book whenever any customer purchase any book.
- 4. Our objectives is just an initiative it will made to more further and developed work of art.

1.4 PROPOSED SYSTEM WITH METHODLOGY

- Easy to use
- Enable smooth and secure operation
- Increase processing speed
- User friendly interface
- Chances of errors are reduced.
- Trust and safety on user data.

1.5 Feasibility Study

1.5.1 Technical Feasibility

Technical feasibility aims on application hardware, software and to what level can the system be supported. When we examine the technical feasibility we give more importance to the configuration of the system rather than the hardware. When we perform this we get clear picture of system requirements.

1.5.2 Economic Feasibility

Economic feasibility is most frequently used method to evaluate the effectiveness of the system. We usually assume that cost of the project is not that greater than the benefit of the project. So if we can develop the application easily then it's used for evaluation of the proposed. It's not done to analyze the new system.

1.5.3 Operational feasibility

It basically tells how well the application is acceptable within an organization or business point of view. We should develop a menu which is easily understood by users and can easily access. Providing help and guideline is also best.

REVIEW OF LITERATURE

2.1 Review Summary

In traditional purchasing of book it is difficult to keep record of available books for selling books to a customer .So the purpose of this purchasing of books is to make the work of seller and company books easier by keeping record of available books of different subjects & authors and provide details of the books to customers in a quick manner. This website also provides facility to the user for maintaining and managing stock of books. Staff can calculate bill using this program and also the total sales values automatically updated into the database.

This application is made on Turbo C++. Turbo C++ is an upgraded and optimized version of famous DOS-based Borland Turbo C++ integrated development environment that can now be run on modern versions of Windows such as Vista, 7, 8 and 10. It carries with it all the previously praised features and toolsets found in Borland Turbo C++ for PC but has managed to completely eliminate nearly all of the previously present incompatibility issues that prevented the use of the native version of this IDE tool on modern Windows editions. To make compatibility even better, the latest versions of the app fully support both 32-bit and 64-bit operating systems.

SYSTEM CONFIGURATION

System configuration is the term that defines the computer hardware, the processes as well as very devices that compromises entire system and its boundaries. The term also referred to the specification of the given computer system, from its hardware component to its software and various process that run within that system.

It refers to what type and module of devices are installed and what specific software is being run on the various part of the system. By extension, System configuration also refers to specific operating system that have been set default automatically or manually by a given program or user.

A computer system particularly the operating system, dictates a set of default settings and configuration when the system first comes online. This system dictates the normal function and features that make the system run an effective and stable manner. To this end the operating system have their own configuration utilities to allow administrators are used to change the configuration of the system.

3.1 Hardware requirements:

Minimum requirements of 64 MB RAM.

3.2 Software requirements:

- 1. Turbo C++
- 2. Windows 7

MODULE DESCRIPTION

4.1 Main menu: In main menu module user can login as a admin or a staff. Admin have the accessibility that he can update the stock details check the book information and also add new book records where a staff can only sell a book and generate the bill.

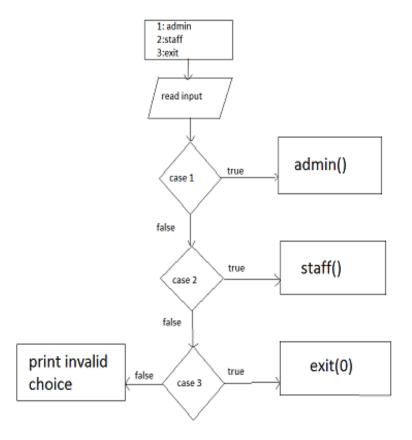


Figure 1.1: Main control

- **4.2 Admin:** In admin panel the user who log in as a admin can do all the operation which mentioned below:
- a) The user can add new book records.
- b) He/She can show any book details by entering the book id.
- c) Also editing can be done.

For entering admin panel user must need to enter the password. If it is correct then only user permitted to enter admin panel.

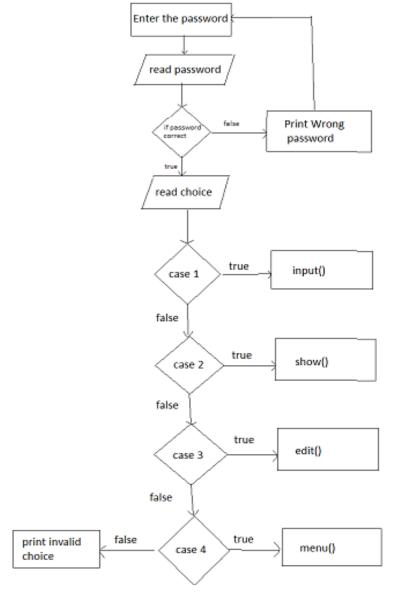


Figure 1.2: Admin Panel

- **4.3 Staff:** A staff can also perform some operation in this software. A staff donot need to enter any password as he/she do not perform any big operation. A staff can do the things mentioned below:
- a) This type of user need to enter the book id only. The system will automatic fetch the selling price of the book and update the stock in the database.

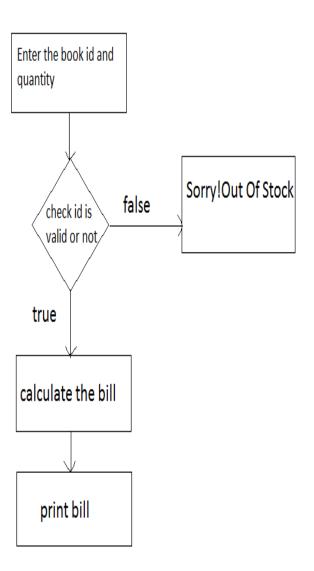
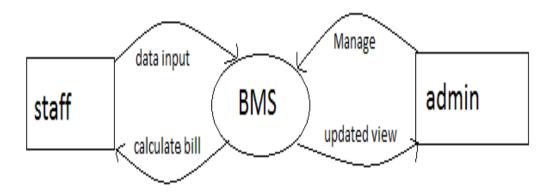


Figure 1.3: Staff module

SYSTEM DESIGN

5.1 DATA FLOW DIAGRAM(DFD):



Context diagram

Figure 2.1: Context Diagram (DFD)

This is the context diagram of the system. The Context Diagram shows the system under consideration as a single high-level process and then shows the relationship that the system has with other external entities (systems, organizational groups, external data stores, etc.). Another name for a Context Diagram is a Context-Level Data-Flow Diagram or a Level-0 Data Flow Diagram. Since a Context Diagram is a specialized version of Data-Flow Diagram, understanding a bit about Data-Flow Diagrams can be helpful.

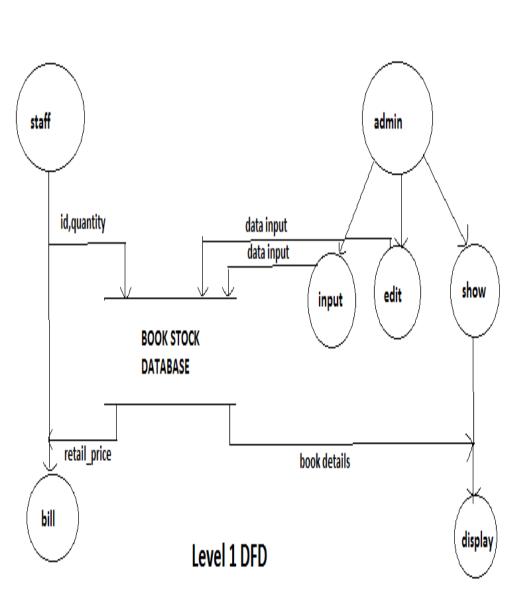


Figure 2.2: Level 1 DFD

This is level 1 DFD. Here the user can more understand about the system that he understood in context diagram.

SYSTEM IMPLEMENTATION

6.1 IMPLETATION (SOURCE CODE):

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
int n=0,s,i=0,p=0,p1=0,p2=0,j=0,c,s1,nb,qnty,idgenerate=1;
long int id,id1,i1=0;
char name[20],nauthor[20],npub[20],pubyear[20],ch,str[20],str1[20]="1234";
long int ncost,nrtp,nid;
void admin();
void sell();
void menu();
void input();
void edit();
void show();
struct record
char title[20];
long int b_id;
char author[30];
int qty;
long int cost;
long int retailprice;
long int total_sales;
int unit;
long int profit;
}o[100];
```

6.2 OUTPUT SCREENSHOTS:

MAIN MENU:

```
Press 1 for continue as an administrator
Press 2 for continue as a staff
Press 3 for close
1
```

Figure 3.1 : Main menu Output

This is main menu section where user can navigate between administrator and staff. If user choose admin then he need to enter password ,otherwise it will come back to main menu page.

ADMIN PANEL:

```
Enter the 4 digit password

****

********** Admin panel *********

Press 1 for adding new book

Press 2 for print book record

Press 3 for edit a book

Press 4 for back to main menu

-
```

Figure 3.2 : Admin Panel

In this section an admin can add a new book details, show the book records as well as user can edit any information about the book. To do this he must enter the correct password.

ADD BOOK DETAILS:

Figure 3.3: Adding a book details

Here the user adding a new book record by entering the valid book name, author name, cost of the book and the retail price of the book. After successful It will give a unique book id which need to note for the admin.

SHOWING AFTER ADDING:

```
Press the Id number for showing details

Id : 1
Name : Math
Author : A.Mukherjee
Quantity : 12
Cost : 250
Retail Price : 300
Number of book sold : 0
Total amount : 0
Total profit : 0
```

Figure 3.4: Show after adding book

After adding the book admin can check the book details by entering the unique book id. If the id is valid the he can show the book details.

EDIT AS AN ADMIN:

```
Press the Id number for showing details
What you want to edit?
1: Name
2: ID
3: Author
4: Quantity
5: Cost
6: Retail Price
7: Back to main menu
Enter the number of books to be added in the stock
10_
```

Figure 3.5: Edit as an admin

Here the admin edit the book details by entering the correct book id. If the book id is valid then the admin need to choose which field he want to edit. After choosing admin need to enter the new value. Then the new value will successfully updated.

AFTER EDITING SHOW THE UPDATED DETAILS:

```
Press the Id number for showing details

Id : 1
Name : Math
Author : A.Mukherjee
Quantity : 22
Cost : 250
Retail Price : 300
Number of book sold : 0
Total amount : 0
Total profit : 0
```

Figure 3.6: Show after edit

After editing the details when admin recheck the details then he can show that the details is changed.

GOTO STAFF PANEL:

```
********* Main menu *********

Press 1 for continue as an administrator

Press 2 for continue as a staff

Press 3 for close

2_
```

Figure 3.7: Staff Panel

Now the user entered into staff panel. To enter this section he do not need to give any password. There can be more than one staff.

SELLING A BOOK:

```
Enter the book id

Enter the number of quantity

10

Total price = 3000

*********** Main menu **********

Press 1 for continue as an administrator

Press 2 for continue as a staff

Press 3 for close
```

Figure 3.8: Selling book

In this section the user selling a book. Firstly, he need to enter a valid book id and the quantity. The system will automatically calculate the price and the details in the database.

AFTER SELLING THE UPDATED DETAILS:

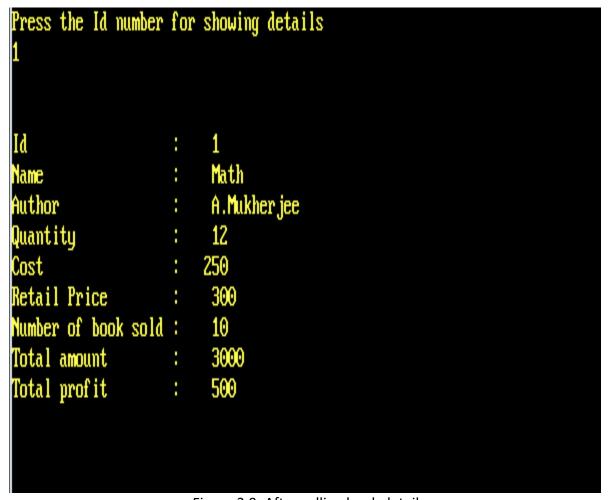


Figure 3.9: After selling book details

After selling a book if an admin check the book details then it will update the total amount and the total profit of the book. No one can modify these two fields. It will automatically handle by the system.

System Testing

Testing is done to identify bugs in the project. Bugs identified are fixed and once the problem is resolved, fixes are re-tested. A test case describes an input, action, or event and an expected response, to determine if a feature of a project is working correctly. A test case may contain particulars such as test case identifier, test case name, objective, test conditions/setup, input data requirements, steps, and expected results.

Test plan describes the objectives, scope, approach, and focus of a project testing effort. The process of preparing a test plan is a useful way to think through the efforts needed to validate the acceptability of a project. Complete test plan helps people understand the project validation. The following are some of the items that might be included in a test plan, depending on the particular project:

- Objective of testing effort
- Relevant requirements
- Assumptions and dependencies
- Project risk analysis
- Testing priorities and focus
- Scope and limitations of testing
- Problem tracking and resolution tools and processes
- Software entrance and exit criteria
- Test suspension and restart criteria
- Coordination issues and open issues

Levels of testing are:

- Unit Testing
- Integration Testing
- Validation Testing
- Acceptance Testing

7.1 UNIT TESTING

It basically tests each and every individual modules of the application designed. It is similar to coding after source level has been reviewed and verified after it has been developed. It is very helpful in maintaining the code well. Codes can be reused well.

7.2 INTEGRATION TESTING

In unit testing every units are tested separately whereas in integration testing those units are tested by combining them as a group. Testing is performed to make it error-free and interactions happen between the system or integrated components.

They are two approaches in integration testing:

- Top Down Approach
- Bottom Up Approach

7.3 VALIDATION TESTING

Validation testing is done at the final stage to determine whether it satisfies the customer's requirements. By doing this we can ensure that the application meets the customer's needs.

7.4 ACCEPTANCE TESTING

This is a type of test done for acceptability. And this is done after the system testing before delivering the product.

There are following types of acceptance testing done:

- Internal Acceptance Testing
- External Acceptance Testing
- Customer Acceptance Testing
- User Acceptance Testing

Internal acceptance testing is also known as alpha testing which is performed by the organization.

External acceptance testing is performed by non-organization employees.

As name suggests customer acceptance testing is performed by the customers of the organization.

User acceptance testing is also known as beta testing is finally done by the end-users of the application.

RESULTS AND DISCUSSIONS

8.1 CONCLUSION

This software is efficient in maintaining book details and can easily perform operations on book records. This software also reduces the work load of the book shop manager as well as staff.

In future, this system can launch web site for easy online registration. In this system there is limitation that we cannot have any accounts section that manager can handle this. In future, it can be extended using this function.

8.2 FUTURE ENHANCEMENT

Modify this system to perform additional operations such as showing the accounts information like GST information, total sales and profit/loss in a calendar year. In future the system can be done online

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