

Project Title: Inquiry System for Wisdom Book Shop

Unit No: 18

Module: Procedural Programming

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Table of Contents

Introduction and Problem Background

Wisdom is a famous book seller in the city. They sell enormous range of books under different categories such as IT, English, fiction, music, etc... Customers can make an inquiry about different books over the phone and by walking to their help desk. Company has manual system to maintain the details of the books (Book ID, category, book name, description about book, price, available quantity, publisher and author).

Day by day their customer base is growing up. Therefore it has become very hard for the staffs to handle day to day inquiries. Management needs a proper solution to reduce the work load of employees, to get better performance from them and enhance customer satisfaction through better service. So they decide to go for automated inquiry system.

Wisdom book shop management requested to program an automated inquiry system with different privileges for each staff member so that they can keep track of who's accessing the account. The software team, who is going to develop and design an inquiry system planned to include the following features to enhance user friendly and security of the system;

- 1) Proper authentication to the system (login).
- 2) List of special offers.
- 3) List of available book categories.
- 4) Search specific book information.
- 5) Exit.

This report includes the strength and weakness of the developed program with very strong justifications for language selection and modularization for clear understanding and future enhancements.

LO 1.1**Computer Programming Languages**

Computer Programming Language is any of various languages for expressing setoff detailed instruction for a digital computer. Such instruction can be executed directly when they are in the computer manufacturer-specific numerical form known as machine language, after a simple substitution process when expressed in a corresponding assembly language, or after translation form some higher-level language (Hemmendinger, 2015).

Types Programming Languages**1. Machine Languages**

A machine language consists of the numeric codes for the operations that a particular computer can execute directly. Codes are strings of 0s and 1s, or binary digits.

2. Assembly Languages

Assembly language is one level above machine language. It uses short mnemonic codes for instructions and allows the programmer to introduce names for blocks of memory that hold data.

3. Algorithmic Languages

Algorithmic languages are designed to express mathematical or symbolic computations. They can express algebraic operations in notation similar to mathematics and allow the use of subprograms that package commonly used operations for reuse. They were the first high level languages. (Ex: FORTRAN, ALGOL, LISP, C).

4. Business-Oriented Languages

(Ex: COBOL, SQL).

5. Education-Oriented Languages

(Ex: BASIC, PASCAL, LOGO, HYPERTALK).

6. Object-Oriented Languages

Object-oriented languages help to manage complexity in large programs. Objects package data and the operations on them so that only the operations are publicly accessible and internal details of the data structures are hidden. This information hiding made large-scale programming easier by allowing a programmer to think about each part of the program in isolation.

(Ex: C++, ADA, JAVA, VISUAL BASIC)

7. Declarative Languages

Declarative languages, also called non-procedural or very high level, are programming languages in which (ideally) a program specifies what is to be done rather than how to do it (Ex: Logic Programming Language :- PROLOG, Functional Languages :- LISP, ML, Haskell)

8. Scripting Languages

Scripting languages are sometimes called little languages. They are intended to solve relatively small programming problems that do not require the overhead of data declarations and other features needed to make large programs manageable. (Ex: PERL)

9. Document Formatting Languages

Document formatting languages specify the organization of printed text and graphics. (Ex: TEX, POSTSCRIPT, SGML)

10. Display Languages

(Ex: HTML, XML) (Hemmendinger, 2015).

Procedural Programming

Procedural programming is the standard approach used in traditional computer language such as C, Pascal, and FORTRAN. The basic idea is to have a program specify the sequence of steps that implements a particular algorithm. Procedural programming is a term used to denote the way in which a computer programmer writes a program. This method of developing software, which also is called an application, revolves around keeping code as concise as possible. It also focuses on a very specific end result to be achieved (Slideshare, 2016).

Following Benefits are there for using a Procedural Programming

- Excellent for general purpose programming
- Many books and references available on well-tried and tested coding algorithms - no need to re-invent the wheel.
- Good level of control without having to know precise target CPU details - unlike low level languages.
- Portable source code - use a different compiler to target a different CPU (Teach IT, 2016).

Structured Programming

C++ is a structured programming language which is based on three main steps or sections of its procedural section;

- 1. Sequence** Execute a list of statements in order.
 - 2. Repetition** Repeat a block of statements while a condition is true.
 - 3. Selection** Choose at most one action from several alternative conditions.
- (Depaul University, 2016)

Wisdom Bookshop database management is required such system of Sequence, Repetition and Selection. To understand structured programming, think in terms of a section of program code that has only one entry point and one exit point. It is very important that there cannot be multiple entry points or multiple exit points. There must be only one way into the section of code and one way out of the section of code, even though C++ is object oriented programming language it is a highly compatible with procedural programming as well, so it is used to create the Database system for Wisdom Bookshop in this particular scenario (Baldwin, 2007).

LO 2.1

Following units of functions are designed for Wisdom book shop data base

Main Function**Wisdom Book Shop Welcome Message.**

Required output → Welcome message.

Login function for Wisdom Book Shop database

Display main functions to select

Required Inputs → Select an option from main menu

If Admin Login Selected

Required Inputs → Username & password.

Required file → A file contains username and password

Required output → If username & password matching.

If matching following functions will be displayed.

01: ADD NEW BOOKS

02: DISPLAY ALL BOOKS

03: SEARCH BOOKS BY ID NUMBER

04: SEARCH BOOKS BY CATEGORY

05: SEARCH BY BOOK NAME

06: DELETE & UPDATE BY DISPLAY LIST

07: SEARCH & DELETE BY BOOK NAME

08: SEARCH & DELETE BY BOOK CATEGORY

09: SEARCH & UPDATE BY BOOK NAME

10: SEARCH & UPDATE BY BOOK ID

11: VIEW SPECIAL OFFERS

12: HELP

13: EXIT

Required Input → A selection from the list by indicating number.

If not matching → Try again to enter username & password.

01: ADD NEW BOOKS

Required Input → Add those details to the Database file.

Required Output → Details of the book to be added.

Required File → A file contains data of books.

02: DISPLAY ALL BOOKS

Required Output → Book list of all books.

Required File → A file contains data of books.

03: SEARCH BOOKS BY ID NUMBER

Required input → Book ID

Required file → A file contains data of books.

Required Output → Search Results.

04: SEARCH BOOKS BY CATEGORY

Required input → Book Category.

Required file → A file contains data of books.

Required Output → Search Results.

05: SEARCH BY BOOK NAME .

Required input → Book Name.

Required file → A file contains data of books

Required Output → Search Results.

06: DELETE & UPDATE BY DISPLAY LIST

Required Output → All Booklist.

Required file → A file contains data of books

Required input → Select Update or Delete.

Book ID which is going to Update or Delete.

Required Output → Confirmation Message or Feedback.

07: SEARCH & DELETE BY BOOK NAME

- Required input → Book Name Which is going to Delete.
- Required file → A file contains data of books
- Required Output → Search Results
- Required input → Confirm again to delete the Searched Book.
- Required Output → Confirmation Message or Feedback.

08: SEARCH & DELETE BY BOOK CATEGORY

- Required input → Book category which is going to delete.
- Required file → A file contains data of books
- Required Output → Search Results
- Required input → Confirm again to delete the searched book.
- Required Output → Confirmation message or feedback.

09: SEARCH & UPDATE BY BOOK NAME

- Required input → Book Category which is going to update.
- Required file → A file contains data of books
- Required Output → Search results
- Required input → Confirm to update the searched book and updated Data.
- Required Output → Confirmation Message or Feedback.

10: SEARCH & UPDATE BY BOOK ID

- Required input → Book ID which is going to update.
- Required file → A file contains data of books
- Required Output → Search Results
- Required input → Confirm to update the searched book and updated Data.
- Required Output → Confirmation Message or Feedback.

11: VIEW SPECIAL OFFERS

Required Output → Book list of all Special Offers books.

Required File → A file contains data of books.

12: HELP

Required Output → Help Information.

If staff functions selected

Then Go to Staff or Guest Login Options

Required Inputs → Username & Password.

Required file → A file contains username and password

Required output → If username & Password matching.

If matching following functions will be displayed.

- . **01: DISPLAY ALL BOOKS**
- . **02: SEARCH BOOKS BY ID NUMBER**
- . **03: SEARCH BOOKS BY CATEGORY**
- . **04: SEARCH BY BOOK NAME**
- . **05: SEARCH BY BOOK AUTHOR**
- . **06: SEARCH BY BOOK PRICE**
- . **07: VIEW SPECIAL OFFERS**
- . **08: HELP**
- . **09: EXIT**

Required Input → A selection from the list by indicating number.

If not matching → Try again to enter username & password.

01: DISPLAY ALL BOOKS

Required Output → Book list of all books.

Required File → A file contains data of books.

02: SEARCH BOOKS BY ID NUMBER

Required input → Book ID
Required file → A file contains data of books.
Required Output → Search Results.

03: SEARCH BOOKS BY CATEGORY

Required input → Book Category.
Required file → A file contains data of books.
Required Output → Search Results.

04: SEARCH BY BOOK NAME

Required input → Book Name.
Required file → A file contains data of books
Required Output → Search Results.

05: SEARCH BY BOOK AUTHOR

Required input → Book author.
Required file → A file contains data of books
Required Output → Search Results.

06: SEARCH BY BOOK PRICE

Required input → Book price.
Required file → A file contains data of books
Required Output → Search Results.

07: VIEW SPECIAL OFFERS

Required Output → Book list of all Special Offers books.
Required File → A file contains data of books.

08: HELP

Required Output → Help Information.

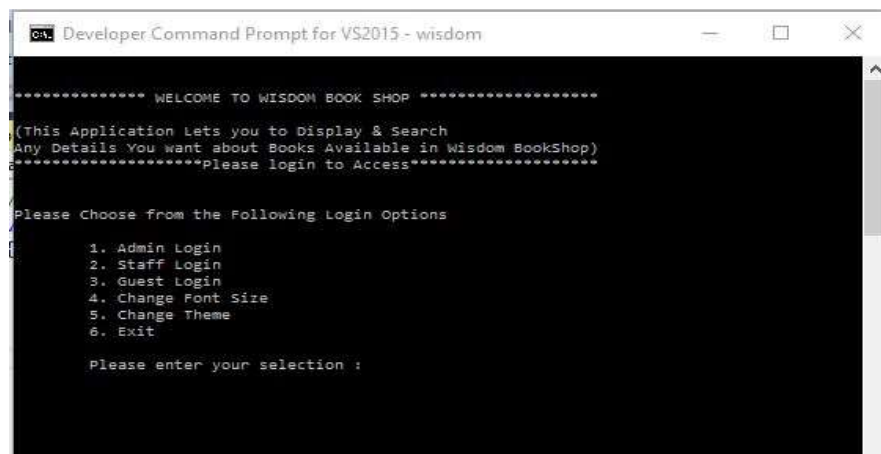
LO 4.4

User Manual for Wisdom Book Shop's Enquiry System

Under any particular book shop, there are various number and types of books available and it is sometimes even difficult for the book shop owner to remember the details of any particular book. With this new book shop Enquiry system, book shopkeeper will find easier to perform all the operations which are needed for their daily business transactions. As there will be a common system and screen for all types of users but to perform operations related to admin part, that person should have a valid login id and password. Comprehensive user manual is provided below use this particular Enquiry system.

Login to the Wisdom Enquiry System

Once you open the program welcome message and login instructions will be displayed, If you want to login as an admin then you input '1' to enter your admin username & password as shown in below screenshot.



```
***** WELCOME TO WISDOM BOOK SHOP *****
(This Application Lets you to Display & Search
Any Details You want about Books Available in Wisdom BookShop)
*****Please login to Access*****

Please Choose from the Following Login Options

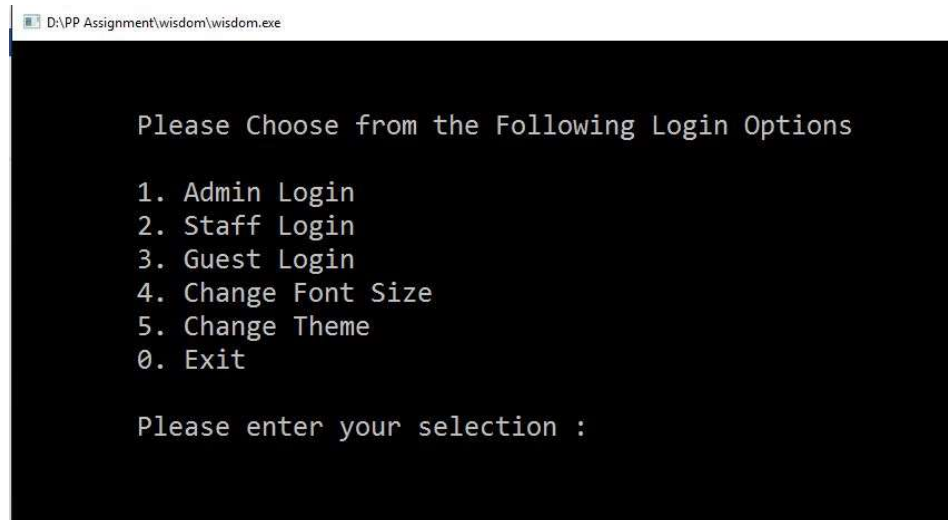
1. Admin Login
2. Staff Login
3. Guest Login
4. Change Font Size
5. Change Theme
6. Exit

Please enter your selection :
```

Figure 1 Initial welcome message and main menu

04) Change Font Size

From the main menu input no '4' will provide an option to change the font size, you can enter a font size to change whole program's font size, you cannot change the font size of specific line or function. Font size must be less than 25 and greater than 5. A sample of increased font size display given below



```
D:\PP Assignment\wisdom\wisdom.exe

Please Choose from the Following Login Options

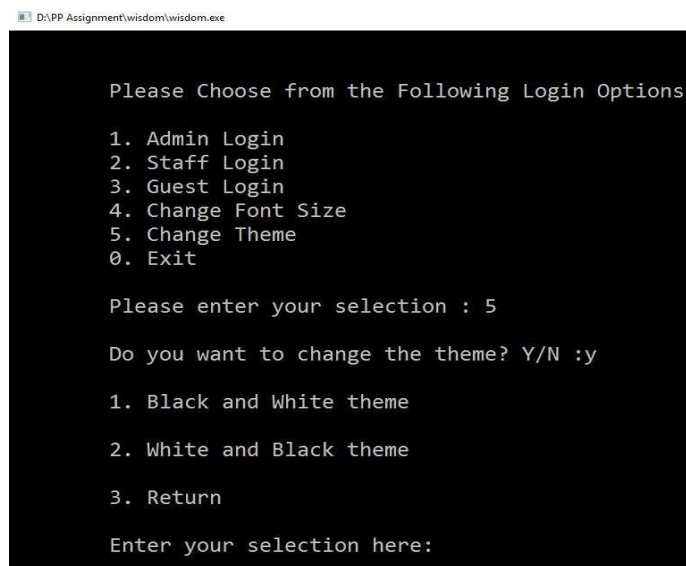
1. Admin Login
2. Staff Login
3. Guest Login
4. Change Font Size
5. Change Theme
0. Exit

Please enter your selection :
```

Figure 2 Font size increased to 15

05) Change Theme

For input no '5' you will be asked "Do you want to change the theme? Y/N" if you input 'y' you need select an option from the menu as shown in the picture below



```
D:\PP Assignment\wisdom\wisdom.exe

Please Choose from the Following Login Options

1. Admin Login
2. Staff Login
3. Guest Login
4. Change Font Size
5. Change Theme
0. Exit

Please enter your selection : 5

Do you want to change the theme? Y/N :y

1. Black and White theme
2. White and Black theme
3. Return

Enter your selection here:
```

Figure 3 Changing Theme

From the above options (in Figure 3) input '1' will apply black color background with white color text, input '2' will apply white color background with black color text. A sample of option 2 theme is given below (Figure 4)

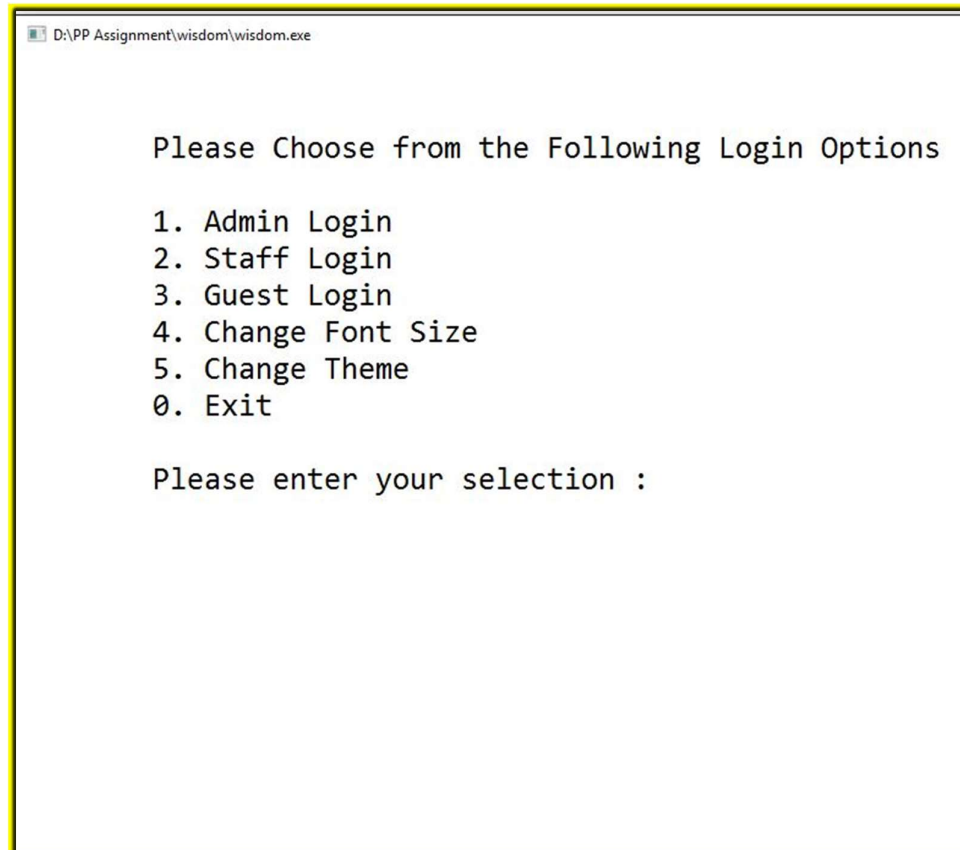
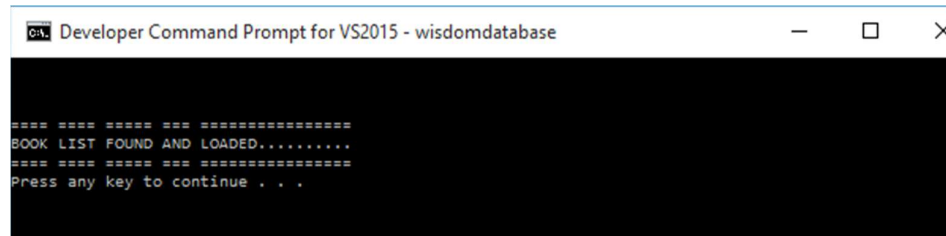


Figure 4 White & black theme

If Admin Login successful

If Admin Username & password matched with existing admin login details in the system, following Message has to Display (Shown in Figure 2)

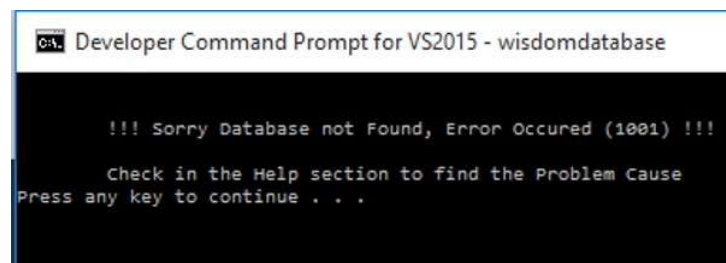


```
====  
BOOK LIST FOUND AND LOADED.....  
====  
Press any key to continue . . .
```

Figure 5 Book List Found and Loaded

This means that database contains all the details of the books is available and ready to display, search, edit, etc...

In case you might see the following error message (As shown in figure 4)

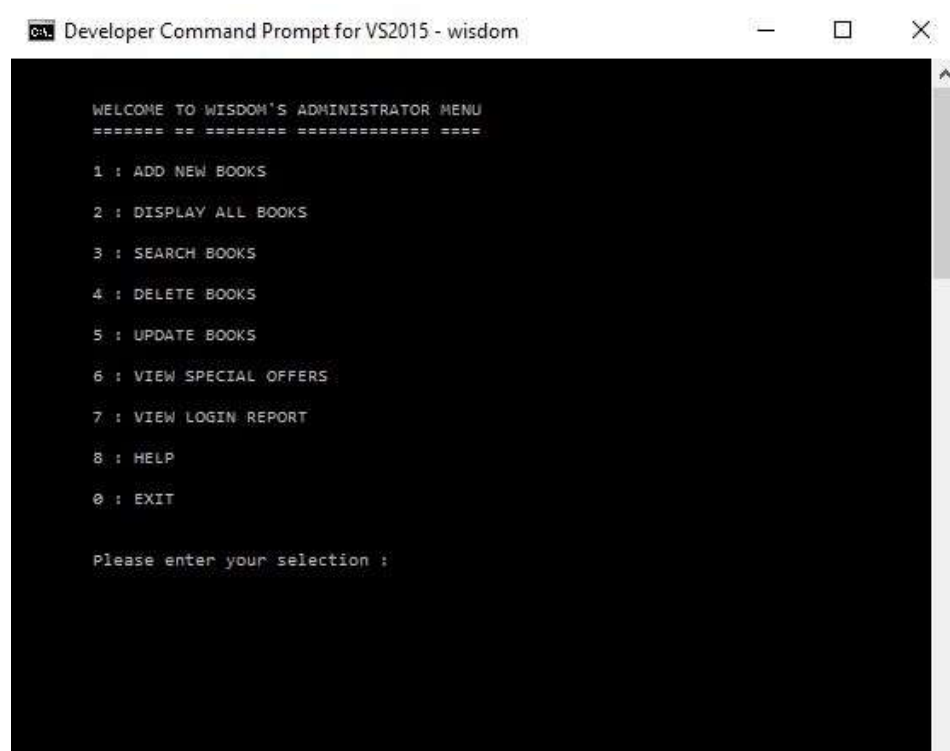


```
!!! Sorry Database not Found, Error Occured (1001) !!!  
  
Check in the Help section to find the Problem Cause  
Press any key to continue . . .
```

Figure 6 Database Not Found

This means the file contains all the book data might be deleted or moved to some other location, you must contact the IT management to fix this issue.

If you see the display as in the Figure 3 it is normal & you're ready to get into the administrator functions to display, just press enter or any other key one more time to get the admin function menu, in admin functions you will see the following options.



```
Developer Command Prompt for VS2015 - wisdom

WELCOME TO WISDOM'S ADMINISTRATOR MENU
=====
1 : ADD NEW BOOKS
2 : DISPLAY ALL BOOKS
3 : SEARCH BOOKS
4 : DELETE BOOKS
5 : UPDATE BOOKS
6 : VIEW SPECIAL OFFERS
7 : VIEW LOGIN REPORT
8 : HELP
0 : EXIT

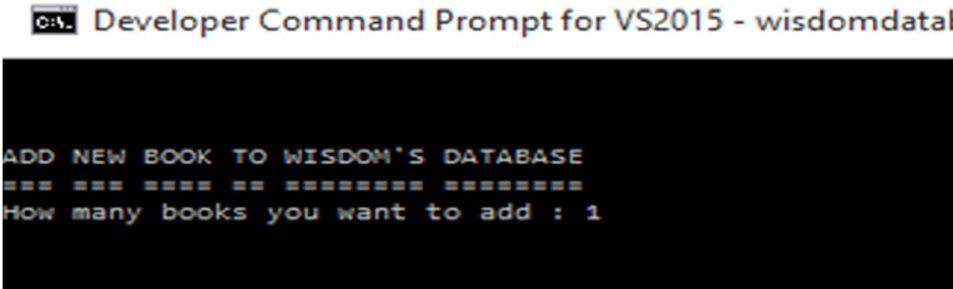
Please enter your selection :
```

Figure 7 Administrator Menu

Above mentioned functions will be displayed in admin menu. To select from the menu you need to input the appropriate number in the list, all functions are described below in numbered order in the menu;

ADD NEW BOOKS

For Input No: 1 following Display will appear.

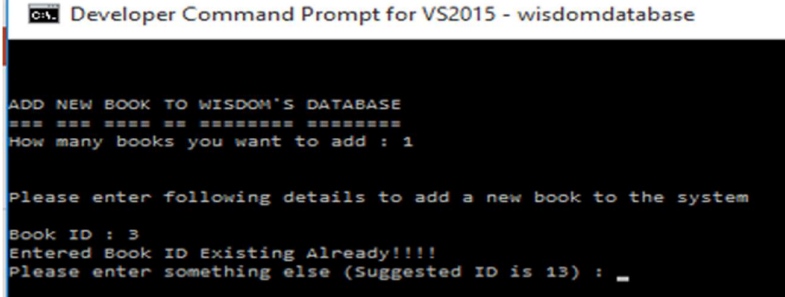


```
C:\> Developer Command Prompt for VS2015 - wisdomdata1

ADD NEW BOOK TO WISDOM'S DATABASE
=== === ==== == =====
How many books you want to add : 1
```

Figure 8 How Many Books want to add?

Here you should enter how many books you want to enter? Then following display will appear.



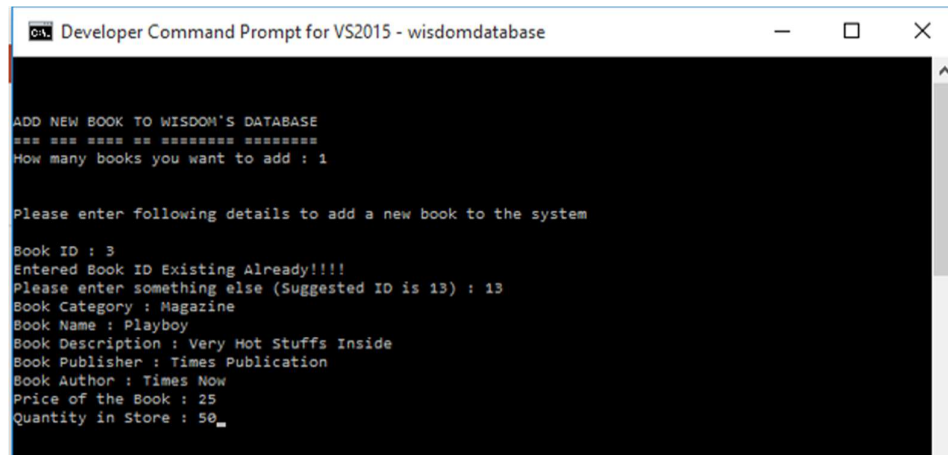
```
C:\> Developer Command Prompt for VS2015 - wisdomdatabase

ADD NEW BOOK TO WISDOM'S DATABASE
=== === ==== == =====
How many books you want to add : 1

Please enter following details to add a new book to the system
Book ID : 3
Entered Book ID Existing Already!!!!
Please enter something else (Suggested ID is 13) : _
```

Figure 9 Add Book ID

Adding book ID will be appear in the beginning of book adding Section. If entered book ID is exist already it will notify you as “Entered Book ID existing already” and system will suggest a suitable ID for you, you cannot enter same ID for more than one books, it is prime key for book entries. Then enter following details of the books as per required;



```
Developer Command Prompt for VS2015 - wisdomdatabase

ADD NEW BOOK TO WISDOM'S DATABASE
=== === === === =====
How many books you want to add : 1

Please enter following details to add a new book to the system

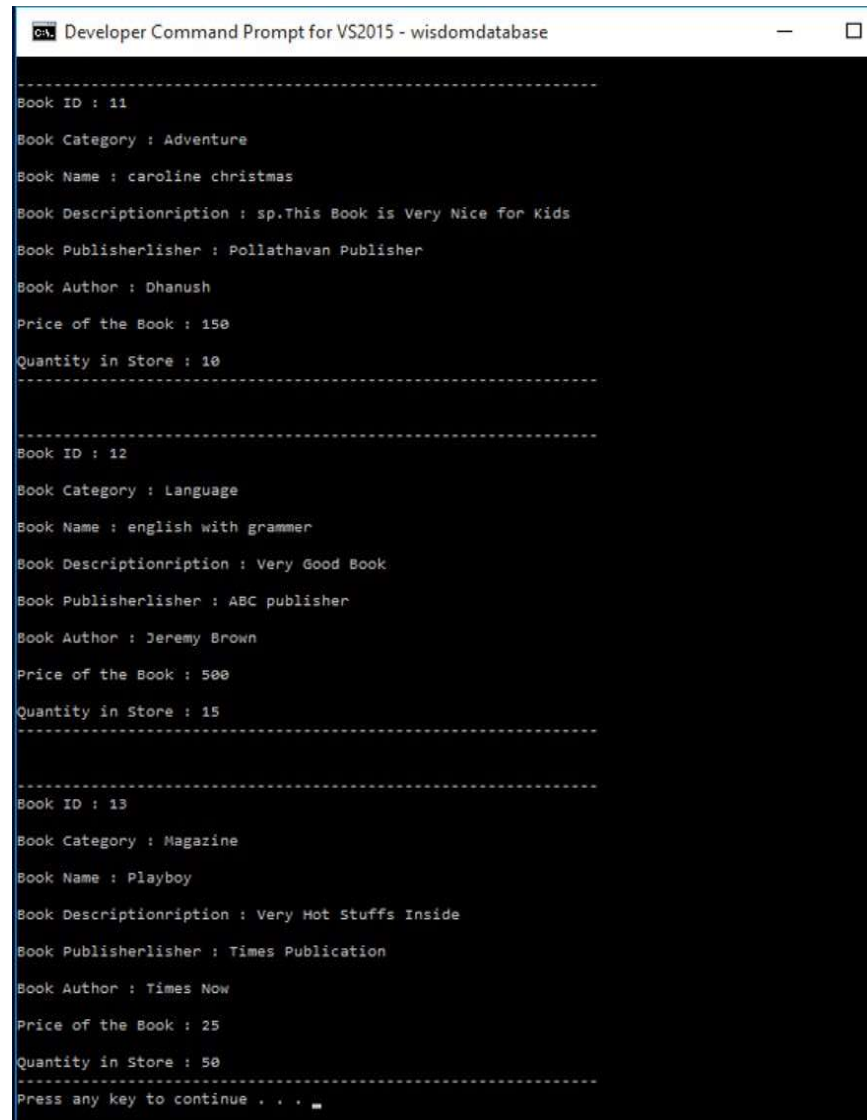
Book ID : 3
Entered Book ID Existing Already!!!!
Please enter something else (Suggested ID is 13) : 13
Book Category : Magazine
Book Name : Playboy
Book Description : Very Hot Stuffs Inside
Book Publisher : Times Publication
Book Author : Times Now
Price of the Book : 25
Quantity in Store : 50
```

Figure 10 Adding Book Details...

Sample Book details are given above in figure 8. While entering book details in book description if enter book description followed by 'Sp.' then this book will be listed as special offer.

DISPLAY ALL BOOKS

For Input No: 2 Display All books function will be Appear, in this function all the books details will be displayed whatever available in the Wisdom database. A Sample of this function is given below (Figure 8).



```
-----
Book ID : 11
Book Category : Adventure
Book Name : caroline christmas
Book Descriptionription : sp.This Book is Very Nice for Kids
Book Publisherlisher : Pollathavan Publisher
Book Author : Dhanush
Price of the Book : 150
Quantity in Store : 10
-----

-----
Book ID : 12
Book Category : Language
Book Name : english with grammer
Book Descriptionription : Very Good Book
Book Publisherlisher : ABC publisher
Book Author : Jeremy Brown
Price of the Book : 500
Quantity in Store : 15
-----

-----
Book ID : 13
Book Category : Magazine
Book Name : Playboy
Book Descriptionription : Very Hot Stuffs Inside
Book Publisherlisher : Times Publication
Book Author : Times Now
Price of the Book : 25
Quantity in Store : 50
-----
Press any key to continue . . .
```

Figure 11 Display All Books

By scrolling scroll bar at right side all book details can be see through. Just by pressing any key able to return to the admin menu.

03) SEARCH BOOKS

For input No: 3 search function will appear. In this function books can be searched by many criteria. Search menu is given below (Figure 9).

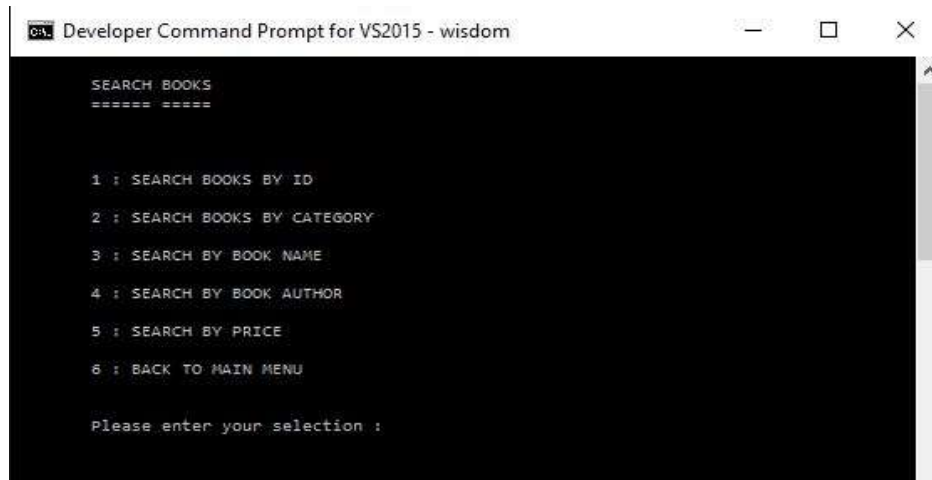


Figure 12 Search Menu

01) SEARCH BOOKS BY ID

For input No: 1 Search books by ID function will appear. In this function books can be searched by ID number of the particular book. A sample search is given below (Figure 10).

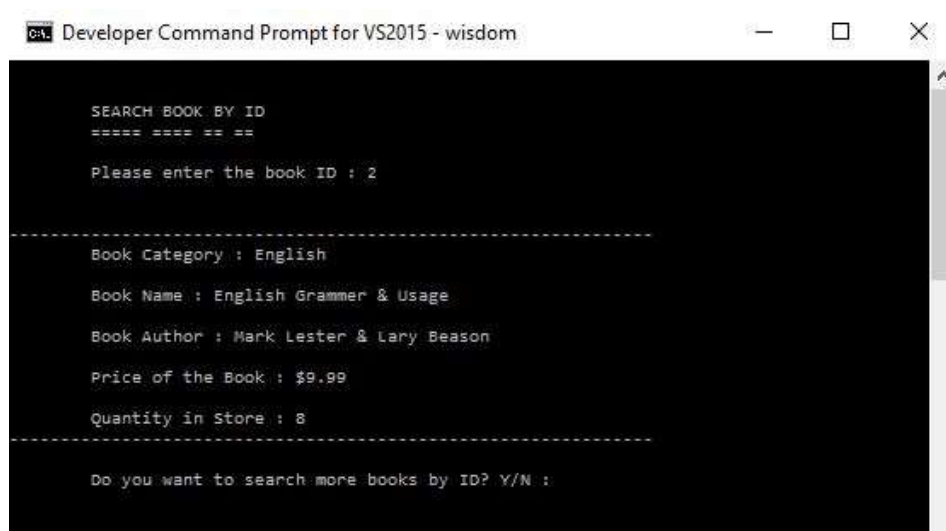


Figure 13 Search by ID

After getting the results there is an indication will be shown to select search more Y/N. by entering 'y' search function can be continued or input 'n' will

take back to search menu. In case if ID not found in the first time search or need to search more then, search function can be repeated by input 'y' as much as required attempts. These inputs are not case sensitive.

02) SEARCH BOOKS BY CATEGORY

For input no: 2 this function will appear. In this function books can be searched by the category of the book. A sample search process is given below (Figure 11).



```
Developer Command Prompt for VS2015 - wisdom

Book Name : Miss Peregrine's Home For Preculiar Children
Book Author : Ransom Riggs
Price of the Book : $5.71
Quantity in Store : 9
-----

Book Name : Rushed
Book Author : Brian Harmon
Price of the Book : $14.99
Quantity in Store : 9
-----

Book Name : still Birth
Book Author : Summer Cooper
Price of the Book : $2.99
Quantity in Store : 11
-----

Book Name : Dark Arts
Book Author : Randolph Lalonde
Price of the Book : $14.99
Quantity in Store : 7
-----

Book Name : Hang Over
Book Author : Vamps
Price of the Book : $8.99
Quantity in Store : 199
-----

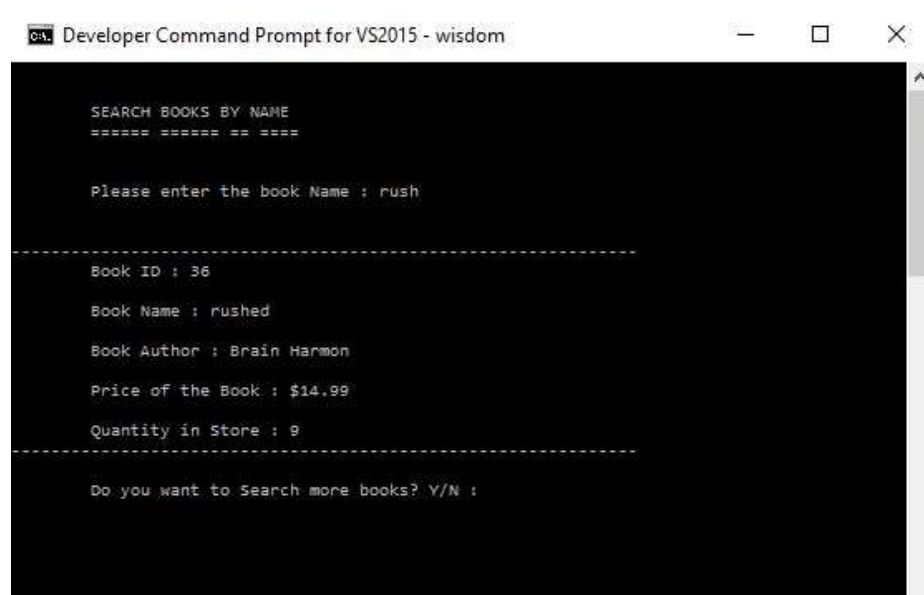
Do you want to search by any other categories? Y/N :
```

Figure 14 Search by Category

Just by entering first three letters of category will find the proper result, moreover search key letters are not case sensitive. These rules are applicable for all kind of searching options. After getting results you can input 'y' to continue the search and 'n' to get back to search menu.

03) SEARCH BY BOOK NAME

For input no: 3 this function will appear. In this function books can be searched by name of the book. A sample search process is given below (Figure 12).



```
Developer Command Prompt for VS2015 - wisdom

SEARCH BOOKS BY NAME
*****

Please enter the book Name : rush

-----
Book ID : 36
Book Name : rushed
Book Author : Brain Harmon
Price of the Book : $14.99
Quantity in Store : 9
-----

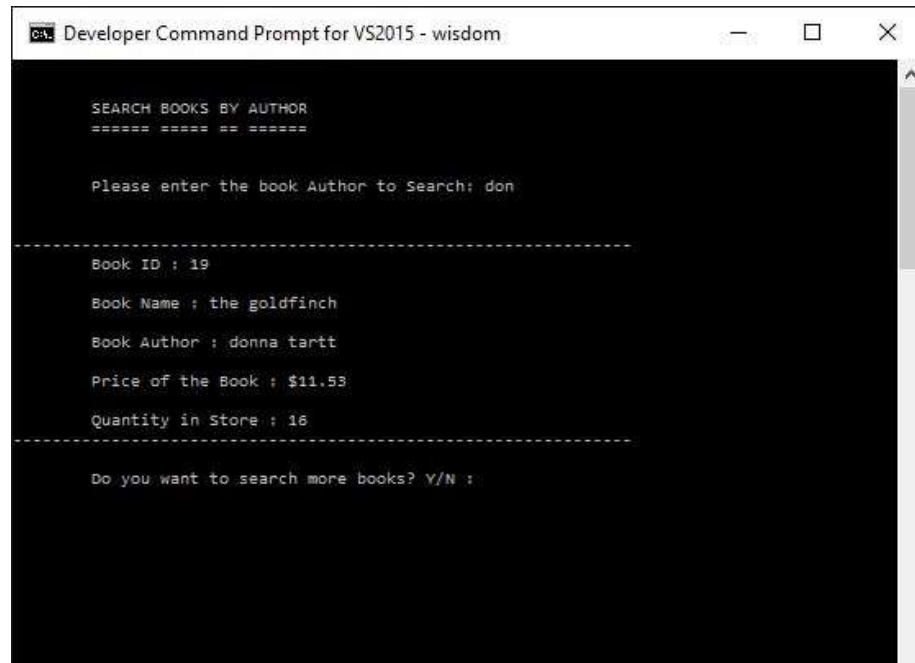
Do you want to Search more books? Y/N :
```

Figure 15 Search by Book Name

After getting results by entering 'n' will get back to admin menu or input 'y' will continue the search function.

04) SEARCH BY BOOK AUTHOR

For input no: 4 this function will appear. In this function books can be searched by author of the book. A sample search process is given below (Figure 13).



```
Developer Command Prompt for VS2015 - wisdom

SEARCH BOOKS BY AUTHOR
*****

Please enter the book Author to Search: don

-----
Book ID : 19
Book Name : the goldfinch
Book Author : donna tartt
Price of the Book : $11.53
Quantity in Store : 16
-----

Do you want to search more books? Y/N :
```

Figure 16 Search Books by Author

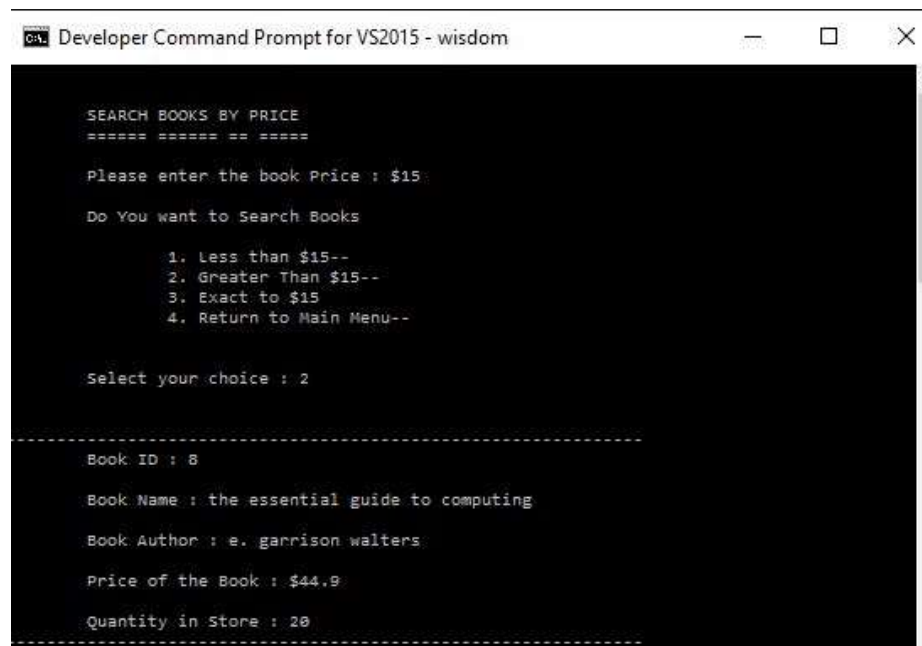
After getting results by entering 'n' will get back to admin menu or input 'y' will continue the search function.

05) SEARCH BY PRICE

For input No: 5 will appear this function, once you enter the amount of book price you will be asked to choose one from the following four options

- 01) Less than \$xx**
- 02) Greater than \$xx**
- 03) Exact to \$xx**
- 04) Return to admin menu**

Sample process given below (Figure 14).



```
Developer Command Prompt for VS2015 - wisdom

SEARCH BOOKS BY PRICE
=====

Please enter the book Price : $15

Do You want to Search Books

    1. Less than $15--
    2. Greater Than $15--
    3. Exact to $15
    4. Return to Main Menu--

Select your choice : 2

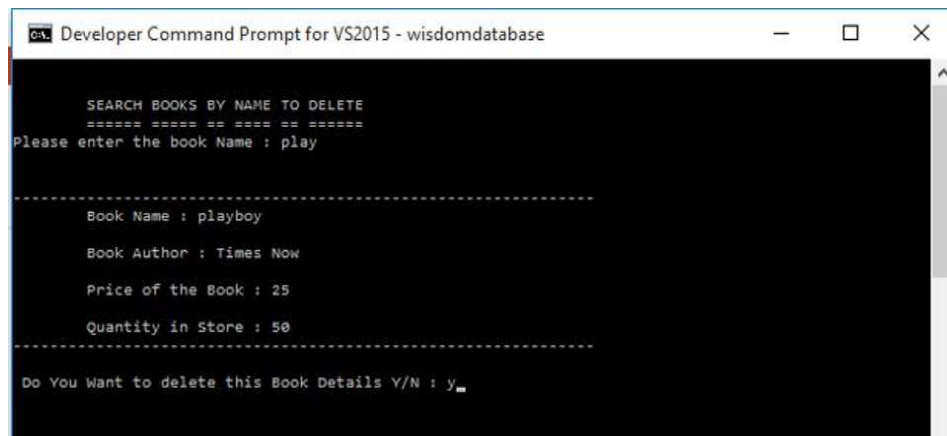
-----
Book ID : 8
Book Name : the essential guide to computing
Book Author : e. garrison walters
Price of the Book : $44.9
Quantity in Store : 20
-----
```

Figure 17 Search by price

After selecting an input from the options it will generate the results as per the request and then input 'y' will repeat the function and 'n' will take back to search menu. From the search menu input '0' will navigate to admin menu.

04) DELETE BOOKS

For Input No: 4 this function will appear, search function will process same as function 3, but additionally delete function added. After searching by book ID, book name or book author, results of the search can be deleted by input 'y' for delete notification. But for search by category & display list & delete functions need to input the book ID after display the search results or display list, sample process is given below in following screenshot (Figure 15).



```
Developer Command Prompt for VS2015 - wisdomdatabase

SEARCH BOOKS BY NAME TO DELETE
=====
Please enter the book Name : play

-----
Book Name : playboy
Book Author : Times Now
Price of the Book : 25
Quantity in Store : 50
-----

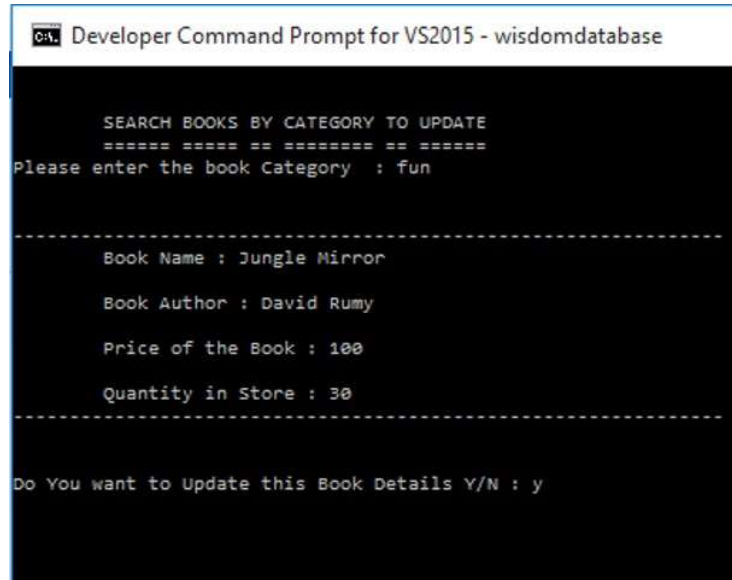
Do You Want to delete this Book Details Y/N : y_
```

Figure 18 Search by Name to Delete

If multiple results are available it can be selected to delete one by one, by inputting 'y' or 'n' as per required in other search functions. Input '0' will navigate back to admin menu.

05) UPDATE

For Input No: 5 this function will appear, search function will process same as function 3, but additionally update function added. After searching by book ID, book name or book author, results of the search can be updated by input 'y' for update notification. But for search by category & display list & update functions need to input the book ID after display the search results or display list, sample process is given below in following screenshot (Figure 16).



```
Developer Command Prompt for VS2015 - wisdomdatabase

SEARCH BOOKS BY CATEGORY TO UPDATE
=====
Please enter the book Category : fun

-----
Book Name : Jungle Mirror
Book Author : David Romy
Price of the Book : 100
Quantity in Store : 30
-----

Do You want to Update this Book Details Y/N : y
```

Figure 19 Search and Update by Category

If multiple results are available it can be selected to update one by one, by inputting 'y' or 'n' as per required. After input 'y' updating process will be appear as shown below (Figure 17).

```

Do You want to Update this Book Details Y/N : y

-----
Book ID : Existing ID is (2)
Enter New ID : 2
-----
Book Category : Existing Category is (funny)
Enter New Category Here : Funny
-----
Book Name : Existing Book is (Jungle Mirror)
Enter New Book Name Here : sp.Jungle Mirror
-----
Book Description : Existing Description is (This Book is Amazing Funny Story Book)
Enter New Description Here : Funny Stories for Kids to Adults
-----
Book Publisher : Existing Publisher is (Man in the Middle Publication)
Enter New Publisher Here : Micky Bellard Publications
-----
Book Author : Existing Author is (David Rummy)
Enter New Author Here : David Mccullum
-----
Price of the Book : Existing Price is $(100)
Enter New Price Here : 150
-----
Quantity in Store : Existing Quantities Available is (30)
Enter New Quantities Here : 12
Updating ..... Updated Successfully
Press any key to continue . . .

```

Figure 20 Updating Existing Book details

As shown in Figure 17 While Updating new Book data, existing book details will be displayed. Once complete updating “updating successfully” message will appear and then press any key to back to update menu. From the update menu input ‘0’ will navigate to admin menu as per guided in the list.

06) VIEW SPECIAL OFFER

For Input No: 6 this function will appear. It will display all the books listed as “special offers”, to add any book to special offer in book description has to be saved by following “Sp.”, to remove any book from special offer list just remove this “Sp.” From the book description and update it. A Sample process is given below (Figure 18).

```

Developer Command Prompt for VS2015 - wisdomdatabase

SPECIAL OFFERS
=====

-----
Book ID : 11
Book Category : adventure
Book Name : christmas caroline
Book Descriptionription : sp.This Book is Suitable for Kids younger than 10 Years Old
Book Publisherlisher : Disney World Publisher
Book Author : Hamilton
Price of the Book : 200
Quantity in Store : 20
-----
Press any key to continue . . .

```

Figure 21 View Special Offer

After the Display View Special Offers Press any key to back to admin menu

07) VIEW LOGIN REPORT

For input No: 7 this function will appear. This Function will show the login time, date & logout time, and date & usage duration of each user.

By selecting from the menu login report can be seen.

- 01) To View Admin login report.
- 02) To View Staff login report.
- 03) To View guest login report.
- 04) Total duration used by admin
- 05) Total duration used by staff
- 06) Total duration used by guest
- 07) Total of overall usage
- 08) Erase all login report.
- 00) Return to admin menu

Sample of few process is given below (Figure 19).



```
D:\PP Assignment\wisdom\wisdom.exe

7. Overall duration used :
8. Erase All Login Reports :
0. Return to Main Menu :
Select an option from the above menu : 6

Total time used by staffs : 37 Minutes & 57 Seconds

1. View Admin Login Report :
2. View Staff Login Report :
3. View Guest Login Report :
4. Total duration used by admin :
5. Total duration used by staffs :
6. Total duration used by guests :
7. Overall duration used :
8. Erase All Login Reports :
0. Return to Main Menu :
Select an option from the above menu : 7

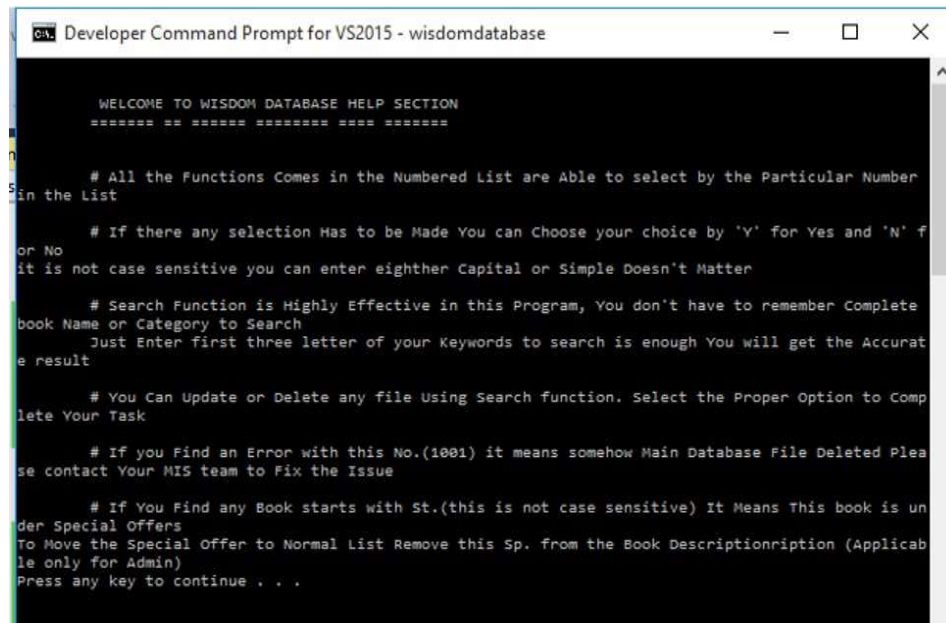
Total of overall time used : 2 Hours & 15 Minutes & 10 Seconds

1. View Admin Login Report :
2. View Staff Login Report :
3. View Guest Login Report :
4. Total duration used by admin :
5. Total duration used by staffs :
6. Total duration used by guests :
7. Overall duration used :
8. Erase All Login Reports :
0. Return to Main Menu :
Select an option from the above menu :
```

Figure 22 View Login Report

08) Help

For input No: 8 this function will appear. This Function will show Help instructions to operate the Wisdom Database Enquiry system. After view the function press any key to return to back to admin menu. From the admin menu input '0' will return to main menu. In main menu input '0' will terminate the program. Actual display of help function is given below (Figure 20)

The image is a screenshot of a Windows command prompt window titled "Developer Command Prompt for VS2015 - wisdomdatabase". The window has a black background with white text. The text displayed is as follows:

```
WELCOME TO WISDOM DATABASE HELP SECTION
*****

# All the Functions Comes in the Numbered List are Able to select by the Particular Number
in the List

# If there any selection Has to be Made You can Choose your choice by 'Y' for Yes and 'N' f
or No
it is not case sensitive you can enter eighther Capital or Simple Doesn't Matter

# Search Function is Highly Effective in this Program, You don't have to remember Complete
book Name or Category to Search
Just Enter first three letter of your Keywords to search is enough You will get the Accurat
e result

# You Can Update or Delete any file Using Search function. Select the Proper Option to Comp
lete Your Task

# If you Find an Error with this No.(1001) it means somehow Main Database File Deleted Plea
se contact Your MIS team to Fix the Issue

# If You Find any Book starts with St.(this is not case sensitive) It Means This book is un
der Special Offers
To Move the Special Offer to Normal List Remove this Sp. from the Book Descriptionription (Applicab
le only for Admin)
Press any key to continue . . .
```

Figure 23 Help Function

LO 4.1**Test Plan for Wisdom book Shop's Enquiry System**

Following table will be described the test plan of this particular enquiry system.

No	Parameter	Description
01	Test Plan Identifier	WT-xxx will be unique reference to identify the test cases, xxx represents a variable.
02	Introduction	Wisdom Book Shop Enquiry System is a tool to manage the Wisdom Book Shop database, It will be used to store, display, search, delete & update the book details of Wisdom Book Shop.
03	Test Item	Wisdom Book Shop Enquiry System
04	Features to be tested	Login functions. Adding, Displaying, Searching, Updating & Deleting Book details. Proper navigations between the menus. Accurate flow of data and functions.
05	Features not to be tested	Common functions between all three of privileged users will not repeat the test for each users. Because same functions are called in different places to execute, in such cases in one executable place only it will be tested.
06	Testing Techniques	<ul style="list-style-type: none">• Black-box testing• White-box testing

07	Approach	<p>Functional Testing</p> <ul style="list-style-type: none"> 01) Unit Testing 02) Integration Testing 03) System Testing 04) Acceptance Testing <p>Non Functional Testing</p> <ul style="list-style-type: none"> 01) Performance Testing 02) Security Testing 03) Usability Testing <ul style="list-style-type: none"> i) Learnability test ii) Efficiency test iii) Satisfaction test iv) Memorability test v) Error test 04) Compatibility test
08	Item Pass/Fail Criteria	Documented whether a software item has Pass or failed its test
09	Test deliverables	Test specifications and Test summary reports
10	Testing tasks	All tasks for planning and executing the testing
11	Environmental needs	Hardware & software, OS & tools required.
12	Staffing and training needs	Staffing requirements and any specific skills and training requirements

Test Case W001

Test Case ID	W001
System	WISDOM Enquiry System
Sub System	Main Menu Functions
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	16/02/2016
Short Description	Testing Change Theme

Pre-condition

System is still not logged in, this function is accessible to all users

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input No 5 to execute	Display “Do you want to change the theme (Y/N)?”	Pass	
02	Input ‘Y’	1. Black and White theme 2. White and Black theme 3. Return Enter your Selection here	Pass	
03	Input ‘1’	Background color changed to black	Pass	

		and text color changed to white		
04	Input '2'	Background color changed to white and text color changed to black	Pass	
05	Input '3'	Back to Main Menu	Pass	

Post-conditions & Comments

Color is changed as per selected and Menu Navigations are working properly.

Test Case W002

Test Case ID	W002
System	WISDOM Enquiry System
Sub System	Main Menu Functions
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	16/02/2016
Short Description	Testing Change Theme

Pre-condition

System is still not logged in, this function is accessible to all users.
--

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input No 5 to execute	Display “Do you want to change the theme (Y/N)?”	Pass	
02	Input ‘N’	Return to Main Menu	Pass	
03	Input ‘3’	Return to Main Menu	Pass	
04	Input ‘abcd’	Display “Please enter a valid Input”	Pass	

Post-conditions & Comments

Main Menu functions remains without any navigation errors or any other bugs. No invalid results found.
--

Test Case W003

Test Case ID	W003
System	WISDOM Enquiry System
Sub System	Main Menu Functions
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	16/02/2016
Short Description	Testing Change Font Size

Pre-condition

System is still not logged in, this function is accessible to all users.
--

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display "Enter font size"	Pass	
02	Input 10	Font size changed to 10 and back to Main Menu	Pass	
03	Input 12	Font size changed to 12 and back to Main Menu	Pass	

Post-conditions & Comments

Entire Font Size is changed to entered font size, No bugs or errors found.
--

Test Case W004

Test Case ID	W004
System	WISDOM Enquiry System
Sub System	Main Menu Functions
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	16/02/2016
Short Description	Testing Change Font Size

Pre-condition

System is still not logged in, this function is accessible to all users.
--

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display "Enter font size"	Pass	
02	Input "Color"	Display "Please Enter a Valid Input" "Enter for Size "	Pass	
03	Input 1500	Display "Please enter font size Less than 25..." "Enter for Size "	Pass	

Post-conditions & Comments

No Errors found while invalid inputs. Font size remains same as it was at the beginning while invalid inputs given.

Test Case W005

Test Case ID	W005
System	WISDOM Enquiry System
Sub System	Main Menu Functions
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	16/02/2016
Short Description	Login to Guest Functions

Pre-condition

System is still not logged in, this function is accessible to all users.
--

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '3' to execute	Display "BOOK LIST FOUND & LOADED" "Press any key to continue"	Pass	
02	Input 'Down arrow key'	Display "Guest Functions Menu"	Pass	
03	Input '0'	Display Main Menu	Pass	

Post-conditions & Comments

No Errors found. System is logged into Guest Functions.

Test Case W006

Test Case ID	W006
System	WISDOM Enquiry System
Sub System	Guest Functions
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Display book details

Pre-condition

System is logged into guest user functions, these functions can be access by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '1' to execute	Display all existing Book details and then following message "Press any key to continue"	Pass	
02	Input 'Return Key'	Return to Display "Guest Functions Menu"	Pass	

Post-conditions & Comments

No Errors found. System is logged into Guest Functions. Displaying book details function is working properly. Menu navigations are working accurately.

Test Case W007

Test Case ID	W007
System	WISDOM Enquiry System
Sub System	Guest Functions
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Display book details

Pre-condition

System is logged into guest user functions, these functions can be access by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input 'a'	Display "Please enter valid input" "Please enter your selection"	Pass	
02	Input 'abcd'	Display "Please enter valid input" "Please enter your selection"	Pass	

Post-conditions & Comments

No errors found. System is logged into guest functions. Menu navigations are working accurately. Invalid inputs displays proper error messages and navigate to try again

Test Case W008

Test Case ID	W008
System	WISDOM Enquiry System
Sub System	Search books by ID number
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by ID number

Pre-condition

System is logged into guest user functions, these functions can be access by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '2' to execute	Display "Please enter the book ID"	Pass	
02	Input '5'	Display book details with ID number '5' And following message "Do you want to search more by book ID? Y/N"	Pass	
03	Input 'Y'	Display "Please enter the book ID"	Pass	
04	Input '10'	Display book details with ID number '10' And following	Pass	

		message “Do you want to search more by book ID? Y/N”		
05	Input ‘N’	Back to Guest Menu	Pass	

Post-conditions & Comments

No errors found. Search results are accurate. Menu navigations are working properly.

Test Case W009

Test Case ID	W009
System	WISDOM Enquiry System
Sub System	Search books by ID number
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by ID number

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '2' to execute	Display "Please enter the book ID"	Pass	
02	Input '0'	Display "Sorry...Given book ID is not found... Would you like to try again? Y/N" Do you want to search more by book ID? Y/N"	Pass	
03	Input 'abc'	Display "Please enter Valid Input" "Would you like to try again? Y/N"	Fail	Displaying "Please enter Valid input" but returning back to

				guest functions.
04	Input '2'	Display "Please enter the book ID"	Pass	
05	Input '4'	Display book details with ID number '4' and following message "Do you want to search more by book ID? Y/N"	Pass	
06	Input 'abc'	Display "Please enter a valid input" "Do you want to search more by book ID? Y/N"	Fail	Displaying "Please enter Valid input" but returning back to guest functions.

Post-conditions & Comments

Menu navigations has confused while invalid inputs. Invalid inputs turn the function back to guest functions. No other errors found. Function can be repeat from the guest menu again and works properly for valid inputs.

Test Case W010

Test Case ID	W010
System	WISDOM Enquiry System
Sub System	Search books by category
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by category

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '3' to execute	Display "Please enter the book category to search"	Pass	
02	Input 'horror'	Display book details with the category name of 'horror "Do you want to search by any other categories? Y/N"	Pass	
03	Input 'Y'	Display "Please enter the book category to search"	Pass	
04	Input 'funny'	Sorry... The given book category is not found....Would you	Pass	

		like to try again? Y/N		
05	Input 'N'	Back to Guest Menu	Pass	

Post-conditions & Comments

No errors found. Search results are accurate. Menu navigations are working properly.

Test Case W011

Test Case ID	W011
System	WISDOM Enquiry System
Sub System	Search books by category
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by category

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '3' to execute	Display "Please enter the book category to search"	Pass	
02	Input '123'	Display "Sorry... The given book category is not found....Would you like to try again? Y/N"	Pass	
03	Input 'abc'	Display "Please enter valid input" Display "Sorry... The given book category is not found....Would you	Fail	Display "Please enter valid input" But returning

		like to try again? Y/N”		to guest menu.
--	--	----------------------------	--	-------------------

Post-conditions & Comments

Expected error messages showing while invalid inputs but menu navigations are confused while invalid inputs. No other errors found. Search function can be executed again from the guest menu and works properly for valid inputs

Test Case W012

Test Case ID	W012
System	WISDOM Enquiry System
Sub System	Search books by name
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by name

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display "Please enter the book name"	Pass	
02	Input 'rushed'	Display book details with the name of "rushed" "Do you want to search more books? Y/N"	Pass	
03	Input 'Y'	Display "Please enter the book name to search"	Pass	
04	Input 'science'	Display "Sorry... The given book name is not	Pass	

		found....Retry? Y/N”		
05	Input ‘N’	Back to Guest Menu	Pass	

Post-conditions & Comments

No errors found. Search results are accurate. Menu navigations are working properly.

Test Case W013

Test Case ID	W013
System	WISDOM Enquiry System
Sub System	Search books by name
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by name

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display "Please enter the book name"	Pass	
02	Input '123'	Display "Sorry... The given book name is not found....Retry? Y/N"	Pass	
03	Input 'abc'	Display "Please enter valid input" "Sorry... The given book name is not found....Retry? Y/N"	Fail	Display "Please enter valid input" But returning to guest menu.

Post-conditions & Comments

Expected error messages showing while invalid inputs but menu navigations are confused while invalid inputs. No other errors found. Search function can be executed again from the guest menu and works properly for valid inputs

Test Case W014

Test Case ID	W014
System	WISDOM Enquiry System
Sub System	Search books by author
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by author

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display "Please enter the book author to search"	Pass	
02	Input 'ran'	Display all the book details with the author name starts with "ran" "Do you want to search more books? Y/N"	Pass	
03	Input 'Y'	Display "Please enter the book author to search"	Pass	
04	Input 'ban'	Display "Sorry... The given book	Pass	

		author is not found....Would you like to try again? Y/N”		
05	Input ‘N’	Back to Guest Menu	Pass	

Post-conditions & Comments

No errors found. Search results are accurate. Menu navigations are working properly.

Test Case W015

Test Case ID	W015
System	WISDOM Enquiry System
Sub System	Search books by author
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by author

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display "Please enter the book author to search"	Pass	
02	Input '123'	Display "Sorry... The given book author is not found....Would you like to try again? Y/N"	Pass	
03	Input 'abc'	Display "Please enter valid input" "Sorry... The given book name is not found....Retry? Y/N"	Fail	Display "Please enter valid input" But returning to guest menu.

Post-conditions & Comments

Expected error messages showing while invalid inputs but menu navigations are confused while invalid inputs. No other errors found. Search function can be executed again from the guest menu and works properly for valid inputs

Test Case W016

Test Case ID	W016
System	WISDOM Enquiry System
Sub System	Search books by price
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by price

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '6' to execute	Display "Please enter the book price"	Pass	
02	Input '10'	Display "Do you want to search books 1. Less than \$10 2. Greater than \$10 3. Exact to \$10 4. Return to main menu Select your choice"	Pass	
03	Input '1'	Display all books less than \$10 "Do you want to search more books? Y/N"	Pass	
04	Input 'y'	Display "Please enter the book price"	Pass	

05	Input '5'	Display "Do you want to search books 1. Less than \$5 2. Greater than \$5 3. Exact to \$5 4. Return to main menu Select your choice"	Pass	
06	Input '2'	Display all books greater than \$5 "Do you want to search more books? Y/N"	Pass	
07	Input 'y'	Display "Please enter the book price"	Pass	
08	Input '10'	Display "Do you want to search books 1. Less than \$10 2. Greater than \$10 3. Exact to \$10 4. Return to main menu Select your choice"	Pass	
09	Input '3'	Display all books exactly \$10 "Do you want to search more books? Y/N"	Pass	
10	Input 'y'	Display "Please enter the book price"	Pass	
11	Input '1500'	Display "Do you want to search books 1. Less than \$1500 2. Greater than \$1500 3. Exact to \$1500 4. Return to main menu"	Pass	

		Select your choice”		
12	Input ‘2’	Display “Sorry... No books found greater than \$1500 ... Retry? Y/N”	Pass	
13	Input ‘y’	Display “Please enter the book price”	Pass	
14	Input ‘0’	Display “Do you want to search books 1. Less than \$0 2. Greater than \$0 3. Exact to \$0 4. Return to main menu Select your choice”	Pass	
15	Input ‘1’	Display “Sorry... No books found less than \$0 ... Retry? Y/N”	Pass	
16	Input ‘n’	Back to guest menu	Pass	

Post-conditions & Comments

No errors found. Search results are accurate. Menu navigations are working properly.

Test Case W017

Test Case ID	W017
System	WISDOM Enquiry System
Sub System	Search books by price
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing Search books by price

Pre-condition

System is logged into guest user functions, these functions can be accessed by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '6' to execute	Display "Please enter the book price"	Pass	
02	Input '10'	Display "Do you want to search books 1. Less than \$10 2. Greater than \$10 3. Exact to \$10 4. Return to main menu Select your choice"	Pass	
03	Input 'abcd'	Display "Please enter valid input" "select your choice"	Pass	
04	Input '6'	Return to guest menu	pass	

Post-conditions & Comments

Expected error messages showing while invalid inputs. Menu navigations are working properly. No errors found.

Test Case W018

Test Case ID	W018
System	WISDOM Enquiry System
Sub System	View special offers
Test Method/Technique	White box Technique

Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing view special offers

Pre-condition

System is logged into guest user functions, these functions can be access by all users of this system.
--

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '7' to execute	Display all existing special offer book details and then following message "Press any key to continue"	Pass	
02	Input 'Return Key'	Return to Display "Guest Functions Menu"	Pass	

Post-conditions & Comments

No Errors found. System is logged into Guest Functions. Displaying special offers function is working properly. Menu navigations are working accurately.
--

Test Case W019

Test Case ID	W019
System	WISDOM Enquiry System
Sub System	Help function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Testing help function

Pre-condition

System is logged into guest user functions, these functions can be access by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '8' to execute	Display Help function with following message "Press any key to continue"	Pass	
02	Input 'Return Key'	Return to Display "Guest Functions Menu"	Pass	

Post-conditions & Comments

No Errors found. System is logged into Guest Functions. Displaying help function is working properly. Menu navigations are working accurately.

Test Case W020

Test Case ID	W020
System	WISDOM Enquiry System
Sub System	Guest Functions
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	17/02/2016
Short Description	Navigate back to main menu & exit

Pre-condition

System is logged into guest user functions, these functions can be access by all users of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '0' to execute	Display main menu with following message, "Dear guest of Wisdom!!!.. Thank you for spent your precious 'xyz' seconds with us" "See you soon..." "Press any key to continue"	Pass	
02	Input '6'	Display "Total time of wisdom enquiry system used 'xyz'(minutes spent	Pass	

		on the enquiry system' minutes ” “Welcome again” “Press any key to continue”		
--	--	--	--	--

Post-conditions & Comments

No Errors found. System is logged out form all Functions. Menu navigations works properly and terminate the system when it is navigate to exit.

Test Case W021

Test Case ID	W021
System	WISDOM Enquiry System
Sub System	Staff Functions
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	18/02/2016
Short Description	Login & Logout staff functions

Pre-condition

System is not logged into any functions, executable from the main menu. This function can be accessed by only with staff ID and password of this system.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '2' to execute	Display "Please enter the username "	Pass	
02	Input 'user1'	Display "Please enter the password "	Pass	
03	Input 'pass1'	Display "BOOK LIST FOUND AND LOADED" "Press any key to continue"	Pass	
04	Input 'Return' key	Display Staff Functions. "All the functions available in the staff menu are same to guest, those functions	Pass	

		tested already from W006 to W019. “		
05	Input ‘0’ to logout	Display “Dear user1 of Wisdom!!!” “You have spent ‘xyz’(seconds spent on system) seconds with wisdom enquiry system” “Press any key to continue”	Pass	
06	Input ‘Return’ key	Display Main menu	Pass	
07	Input ‘6’	Display “Total time of wisdom enquiry system used ‘xyz’(minutes spent on the enquiry system’ minutes ” “Welcome again” “Press any key to continue”	Pass	
08	Input ‘Return’ key	Terminate the system	Pass	

Post-conditions & Comments

No errors found. System is logged out form all functions. Menu navigations works properly and terminate the system when it is navigate to exit.

Test Case W022

Test Case ID	W022
System	WISDOM Enquiry System
Sub System	Staff functions
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Log in & logout staff functions

Pre-condition

System not logged into any accounts, this function can be accessed by only with staff username & password.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '2' to execute	Display "Please enter the username"	Pass	
02	Input 'user0'	Display "Please enter the password"	Pass	
03	Input 'pass0'	Display "Username & password is invalid" "Press any key to continue"	Pass	
04	Input 'Return' key	Display admin menu	pass	

Post-conditions & Comments

No errors found. System is not logged in to staff functions. Menu navigations are working properly.

Test Case W023

Test Case ID	W023
System	WISDOM Enquiry System
Sub System	Admin Functions
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Log in to admin functions

Pre-condition

System not logged into any accounts, this function can be accessed by only with admin username & password.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '1' to execute	Display "Please enter the username"	Pass	
02	Input 'admin1'	Display "Please enter the password"	Pass	
03	Input 'p1'	"Book list found & loaded" "Press any key to continue"	Pass	
04	Input 'Return' key	Display admin menu	pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly.

Test Case W024

Test Case ID	W024
System	WISDOM Enquiry System
Sub System	Admin functions
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Log in to admin function

Pre-condition

System not logged into any accounts, this function can be accessed by only with admin username & password.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '1' to execute	Display "Please enter the username"	Pass	
02	Input 'admin0'	Display "Please enter the password"	Pass	
03	Input 'p0'	Display "Username & password is invalid" "Press any key to continue"	Pass	
04	Input 'return' key	Return to main menu	pass	

Post-conditions & Comments

No errors found. System is not login to any function. Menu navigations are working properly and terminate the system when it is navigate to exit.

Test Case W025

Test Case ID	W025
System	WISDOM Enquiry System
Sub System	Admin functions
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Add new books to system

Pre-condition

System logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '1' to execute	Display "How many books you want to add?"	Pass	
02	Input '1'	Display " (small instruction)" "Book ID"	Pass	
03	Input '40'	Display "Book category"	Pass	
04	Input 'Fiction'	Display "Book name"	Pass	
05	Input 'Alien vs. predator'	Display "Book description"	Pass	
06	Input 'sp.This book is fiction story of alien & human fighting in the moon"	Display "Book publisher"	Pass	

07	Input 'RKGB publishers'	Display "Book author"	Pass	
08	Input 'Susan Dias'	Display "Book price \$"	Pass	
09	Input '4.99'	Display "Quantity in store"	Pass	
10	Input '20'	Display "Book details added successfully" "Press any key to continue"	Pass	
11	Input 'Return' key	Navigate to admin menu	Pass	

Post-conditions & Comments

No errors found. System is login to admin function. Book details added successfully. Menu navigations are working properly. In book description 'sp.' is added in front of description to add this book under special offer category. Book details added to special offers category successfully.

Test Case W026

Test Case ID	W026
System	WISDOM Enquiry System
Sub System	Admin functions
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Log in to admin function

Pre-condition

System logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '1' to execute	Display "How many books you want to add?"	Pass	
02	Input 'abc'	Display "Please enter a valid input" "How many books you want to add"	Pass	
03	Input '1'	Display "Book ID"	Pass	
04	Input '4'	Display "Entered book ID exist already" "Please enter a different ID (Suggested ID is xx)"	pass	

05	Input 'abc'	Display " Please enter a valid input" "Book ID"	Pass	
06	Input all other details until book price	Display "Book Price"	Pass	
07	Input 'xyz'	Display " Please enter a valid input" "Book price"	Pass	
08	Input '10'	Display "Available quantity in store"	Pass	
09	Input 'abcd'	Display " Please enter a valid input" "Available quantity in store"	Pass	
10	Input '20'	Display "Book details added successfully" "Press any key to continue"	Pass	

Post-conditions & Comments

System is logged into admin function. Menu navigations are working properly, while invalid inputs occur system displays proper error messages and navigate to retry.

Test Case W027

Test Case ID	W027
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '1'	Display " Please enter the book ID"	Pass	
03	Input '40'	Display details of book with book ID no 40 and "Do you want to delete this book? Y/N"	Pass	
04	Input 'Y'	Display " Book list found & loaded " "Selected item deleted successfully..." "Do you want to search more? Y/N"	pass	
05	Input 'y'	"Please enter the book ID"	Pass	

06	Input '39'	Display "Sorry given book ID not found would you like to try again? Y/N"	pass	
07	Input 'N'	Display "Press any key to continue"	Pass	
08	Input 'Return' key	Navigate back to delete menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are deleted successfully.

Test Case W028

Test Case ID	W028
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '1'	Display "Please enter the book ID"	Pass	
03	Input 'abcd'	Display "Please enter a valid input" "Please enter the book ID"	Pass	
04	Input '35'	Display details of book with book ID no 35 and "Do you want to delete this book? Y/N"	pass	
05	Input 'abc'	Display "Please enter valid input" "Please enter the book ID"	fail	Displaying "entered book ID not found...." and

				navigate back to delete menu
06	Input '1'	Display "Enter book ID"	pass	
07	Input '40'	Display "Sorry given book ID not found would you like to try again? Y/N"	Pass	
08	Input 'n' key	Display "Press any key to continue"	Pass	
09	Input 'return' key	Navigate back to delete menu	Pass	

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet delete function can be repeated from the delete menu again.

Test Case W029

Test Case ID	W029
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by book category

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '2'	Display "Please enter the book category"	Pass	
03	Input 'horror'	Display details of book with book category name 'horror' and "Do you want to delete any of the books from the results? Y/N"	Pass	
04	Input 'Y'	Display "Enter the book ID you want to delete"	pass	
05	Input 'y'	"Please enter the book ID"	Pass	
06	Input '38'	Display "Selected book list deleted successfully.."	pass	

		“Do you want to delete any other categories? Y/N”		
07	Input ‘N’	Display “Press any key to continue”	Pass	
08	Input ‘Return’ key	Navigate back to delete menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are deleted successfully.

Test Case W030

Test Case ID	W030
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by book category

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '2'	Display " Please enter the book category"	Pass	
03	Input 'abcd'	Display "Sorry the given category is not found..." "would you like to try again? Y/N"	Pass	
04	Input 'abc'	Display "Please enter a valid input" " Please enter the book category"	Fail	Display "Please enter a valid input" But navigate back to delete menu
05	Input '2'	Display " Please enter	Pass	

		the book category”		
06	Input 'cookery'	Display all details of book with category name 'cookery' and “Do you want to delete any book details from results? Y/N”	Pass	
07	Input 'abcd'	Display “Please enter a valid input” ” Please enter the book category”	Fail	Display “Please enter a valid input” But navigate back to delete menu

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet delete function can be repeated from the delete menu again.

Test Case W031

Test Case ID	W031
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by book name

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '3'	Display " Please enter the book name"	Pass	
03	Input 'miss'	Display details of book with book name starts 'miss' and "Do you want to delete this books details? Y/N"	Pass	
04	Input 'Y'	Display "...Deleted successfully....." "Do you want to search more books to delete by name? Y/N"	pass	
05	Input 'y'	"Please enter the book	Pass	

		name”		
06	Input ‘still’	Display details of book with book name starts ‘still’ and “Do you want to delete this books details? Y/N”	pass	
07	Input ‘N’	“Do you want to search more books to delete by name? Y/N”	Pass	
08	Input ‘n’ key	Display “Press any key to continue”	Pass	
09	Input ‘Return’ key	Navigate back to delete menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are deleted successfully. If more than one result available for specific search, it can be deleted one by one selecting y/n for each book result deleting notifications.

Test Case W032

Test Case ID	W032
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by book name

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '3'	Display " Please enter the book name"	Pass	
03	Input 'abcd'	Display "Sorry the given name is not found..." "would you like to try again? Y/N"	Pass	
04	Input 'abc'	Display "Please enter a valid input" " Please enter the book name"	Fail	Display "Please enter a valid input" But navigate back to delete menu
05	Input '3'	Display " Please enter the	pass	

		book name”		
06	Input ‘abcd’	Display “Sorry the given name is not found...” ”would you like to try again? Y/N”	Pass	
07	Input ‘n’	Display “press any key to continue”	Pass	
08	Input ‘Return’ key	Navigate to delete menu	Pass	

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet delete function can be repeated from the delete menu again.

Test Case W033

Test Case ID	W033
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by book author

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '4'	Display " Please enter the Name of book author"	Pass	
03	Input 'summer'	Display details of book with book name starts 'summer' and "Do you want to delete this books details? Y/N"	Pass	
04	Input 'Y'	Display "...Deleted successfully....." "press any key to continue"	pass	
05	Input 'return' key	"Do you want to search more books to delete by	Pass	

		name? Y/N”		
06	Input ‘y’	Display “please enter the name book of author”		
07	Input ‘steve’	Display details of book with book name starts ‘steve’ and “Do you want to delete this books details? Y/N”	pass	
08	Input ‘N’	“Do you want to search more books to delete by author? Y/N”	Pass	
09	Input ‘n’ key	Display “Press any key to continue”	Pass	
10	Input ‘Return’ key	Navigate back to delete menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are deleted successfully. If more than one result available for specific search, it can be deleted one by one selecting y/n for each book result deleting notifications.

Test Case W034

Test Case ID	W034
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	19/02/2016
Short Description	Search & delete by book author

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '4'	Display "Please enter the book author"	Pass	
03	Input 'abcd'	Display "Sorry the given author is not found..." "would you like to try again? Y/N"	Pass	
04	Input 'abc'	Display "Please enter a valid input" "Please enter the author name"	Fail	Display "Please enter a valid input" But navigate back to delete menu
05	Input '4'	Display "Please enter the	pass	

		name of book author ”		
06	Input ‘abcd’	Display “Sorry the given author is not found...” ”would you like to try again? Y/N”	Pass	
07	Input ‘n’	Display “press any key to continue”	Pass	
08	Input ‘Return’ key	Navigate to delete menu	Pass	

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet delete function can be repeated from the delete menu again.

Test Case W035

Test Case ID	W035
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Display & delete by book ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '5'	Display all available books in the database and following message "Do you want to delete any existing book details? Y/N"	Pass	
03	Input 'y'	Display "Enter the book ID you want to delete "	Pass	
04	Input '34'	Display "Selected item deleted successfully....." "Would you like to delete more books? Y/N "	pass	

05	Input 'y'	Display "Enter the book ID you want to delete "	Pass	
06	Input '33'	Display "Selected item deleted successfully" "Would you like to delete more books? Y/N "	Pass	
08	Input 'N'	Display "Press any key to continue"	Pass	
09	Input 'Return' key	Navigate back to delete menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are deleted successfully.

Test Case W036

Test Case ID	W036
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Display & delete by book ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '4' to execute	Display delete function menu	Pass	
02	Input '5'	Display all available books in the database and following message "Do you want to delete any existing book details? Y/N"	Pass	
03	Input 'abcd'	Display "Please enter a valid input" "would you like to try again? Y/N"	Fail	Display "Please enter a valid input" But navigate back to delete menu

04	Input '5'	Display all available books in the database and following message "Do you want to delete any existing book details? Y/N"	Pass	
05	Input '473'	Display "Entered book ID not found in the list " "Would you like to try again? Y/N"	pass	
06	Input 'abcd'	Display "Please enter a valid input" "would you like to try again? Y/N"	Fail	Display "Please enter a valid input" But navigate back to delete menu
07	Input 'n'	Display "press any key to continue"	Pass	
08	Input 'Return' key	Navigate to delete menu	Pass	
09	Input '0'	Display "press any key to continue"	Pass	
10	Input 'Return' key	Navigate to admin menu	Pass	

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet delete function can be repeated from the delete menu again.

Test Case W037

Test Case ID	W037
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '1'	Display " Please enter the book ID"	Pass	
03	Input '2'	Display details of book with book ID no 2 and "Do you want to update this book? Y/N"	Pass	
04	Input 'Y'	Display " Book ID : Existing book ID is (2) : Enter the new ID :	pass	
05	Input '2'	Display " Book category : Existing book category is (English) : Enter the new category here :	Pass	

06	Input 'new category'	Display “ Book name : Existing book name is (IT for management) : Enter the new book name here :	pass	
07	Input 'new book name'	Display “ Book description : Existing book description is (abcd xyz) : Enter the new book description here :	Pass	
08	Input 'new description'	Display “ Book publisher : Existing book publisher is (Willey) : Enter the new book publisher here :	Pass	
09	Input 'new publisher'	Display “ Price of the book : Existing book price is (\$99.99) : Enter the new price here :	Pass	
10	Input 'new price'	Display “ Quantities in the store : Existing quantities are (7) : Enter the new quantities here :	Pass	
11	Input 'new quantities'	Display “Book details updated successfully” “Press any key to continue”	Pass	
12	Input 'Return' key	Navigate back to update menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are updated successfully.

Test Case W038

Test Case ID	W038
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display delete function menu	Pass	
02	Input '1'	Display "Please enter the book ID"	Pass	
03	Input 'abcd'	Display "Please enter a valid input" "Please enter the book ID"	Pass	
04	Input '35'	Display details of book with book ID no 35 and "Do you want to update this book? Y/N"	pass	
05	Input 'abc'	Display "Please enter valid input" "Please enter the book ID"	fail	Displaying "entered book ID not found...." and

				navigate back to update menu
06	Input '1'	Display "Enter book ID"	pass	
07	Input '40'	Display "Sorry given book ID not found would you like to try again? Y/N"	Pass	
08	Input 'n' key	Display "Press any key to continue"	Pass	
09	Input 'return' key	Navigate back to update menu	Pass	

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet update function can be repeated from the update menu again.

Test Case W039

Test Case ID	W039
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book category

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '2'	Display " Please enter the book category"	Pass	
03	Input 'cooking'	Display all details of book with category name 'cooking' and "Do you want to update any book details from results? Y/N"	Pass	
04	Input 'Y'	Display "Enter the book ID you want update"	pass	
05	Input '2'	Display "Book ID : Existing book ID is (2) : Enter the new ID :"		
06	Input '2'	Display " Book category : Existing book category is (English) : Enter the new	Pass	

		category here :		
07	Input 'new category'	Display " Book name : Existing book name is (IT for management) : Enter the new book name here :	pass	
08	Input 'new book name'	Display " Book description : Existing book description is (abcd xyz) : Enter the new book description here :	Pass	
09	Input 'new description'	Display " Book publisher : Existing book publisher is (Willey) : Enter the new book publisher here :	Pass	
10	Input 'new publisher'	Display " Price of the book : Existing book price is (\$99.99) : Enter the new price here :	Pass	
11	Input 'new price'	Display " Quantities in the store : Existing quantities are (7) : Enter the new quantities here :	Pass	
12	Input 'new quantities'	Display "Book details updated successfully" "Press any key to continue"	Pass	
13	Input 'Return' key	Navigate back to update menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are updated successfully. If searched category generates only one result then not necessary to select by book ID to update, directly able to navigate to updating process

Test Case W040

Test Case ID	W040
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book category

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '2'	Display " Please enter the book category"	Pass	
03	Input 'abcd'	Display "Sorry the given category is not found..." "would you like to try again? Y/N"	Pass	
04	Input 'abc'	Display "Please enter a valid input" " Please enter the book category"	Fail	Display "Please enter a valid input" But navigate back to update menu
05	Input '2'	Display " Please enter	Pass	

		the book category”		
06	Input 'cookery'	Display all details of book with category name 'cookery' and “Do you want to update any book details from results? Y/N”	Pass	
07	Input 'abcd'	Display “Please enter a valid input” ” Please enter the book category”	Fail	Display “Please enter a valid input” But navigate back to update menu

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet update function can be repeated from the update menu again.

Test Case W041

Test Case ID	W041
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book name

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '3'	Display " Please enter the book name"	Pass	
03	Input 'mug'	Display details of book with book name 'mug' and "Do you want to update this book details from results? Y/N"	Pass	
04	Input 'y'	Display "Book ID : Existing book ID is (28) : Enter the new ID :"	Pass	
05	Input '28'	Display " Book category : Existing book category is (English) : Enter the new category here :	Pass	
07	Input 'new'	Display " Book name : Existing	pass	

	category'	book name is (IT for management) : Enter the new book name here :		
08	Input 'new book name'	Display " Book description : Existing book description is (abcd xyz) : Enter the new book description here :	Pass	
09	Input 'new description'	Display " Book publisher : Existing book publisher is (Willey) : Enter the new book publisher here :	Pass	
10	Input 'new publisher'	Display " Price of the book : Existing book price is (\$99.99) : Enter the new price here :	Pass	
11	Input 'new price'	Display " Quantities in the store : Existing quantities are (7) : Enter the new quantities here :	Pass	
12	Input 'new quantities'	Display "Book details updated successfully" "Press any key to continue"	Pass	
13	Input 'Return' key	Navigate back to update menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are updated successfully. If searched name generates more than one results then it will show one by one to select to update or not, from that it is able to update it or ignore.

Test Case W042

Test Case ID	W042
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book name

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '3'	Display " Please enter the book name"	Pass	
03	Input 'abcd'	Display "Sorry the given name is not found..." "try again? Y/N"	Pass	
04	Input 'abc'	Display "Please enter a valid input" " Please enter the book name"	Fail	Display "Please enter a valid input" But navigate back to update menu
05	Input '3'	Display " Please enter the book name"	Pass	

06	Input 'mug'	Display all details of book with book name 'mug' and "Do you want to update this book details? Y/N"	Pass	
07	Input 'abcd'	Display "Please enter a valid input" " Please enter the book name"	Fail	Display "Please enter a valid input" But navigate back to update menu

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet update function can be repeated from the update menu again.

Test Case W043

Test Case ID	W043
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book author

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '4'	Display " Please enter the book name"	Pass	
03	Input 'sherry'	Display details of book with book name 'sherry' and "Do you want to update this book details from results? Y/N"	Pass	
04	Input 'y'	Display "Book ID : Existing book ID is (28) : Enter the new ID :"	Pass	
05	Input '28'	Display " Book category : Existing book category is (English) : Enter the new category here :	Pass	
06	Input 'new'	Display " Book name : Existing	pass	

	category'	book name is (IT for management) : Enter the new book name here :		
07	Input 'new book name'	Display " Book description : Existing book description is (abcd xyz) : Enter the new book description here :	Pass	
08	Input 'new description'	Display " Book publisher : Existing book publisher is (Willey) : Enter the new book publisher here :	Pass	
09	Input 'new publisher'	Display " Price of the book : Existing book price is (\$99.99) : Enter the new price here :	Pass	
10	Input 'new price'	Display " Quantities in the store : Existing quantities are (7) : Enter the new quantities here :	Pass	
11	Input 'new quantities'	Display "Book details updated successfully" "Press any key to continue"	Pass	
12	Input 'Return' key	Navigate back to update menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are updated successfully. If searched author generates more than one results then it will show one by one to select to update or not, from that it is able to update it or ignore.

Test Case W044

Test Case ID	W044
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Search & update by book author

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '4'	Display " Please enter the book author"	Pass	
03	Input 'abcd'	Display "Sorry the given book author is not found..." "try again? Y/N"	Pass	
04	Input 'abc'	Display "Please enter a valid input" " Please enter the book author"	Fail	Display "Please enter a valid input" But navigate back to update menu
05	Input '4'	Display " Please enter	Pass	

		the book author”		
06	Input 'sherry'	Display all details of book with book name 'sherry' and “Do you want to update this book details? Y/N”	Pass	
07	Input 'abcd'	Display “Please enter a valid input” ” Please enter the book author”	Fail	Display “Please enter a valid input” But navigate back to update menu

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet update function can be repeated from the update menu again.

Test Case W045

Test Case ID	W035
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Display & update by book ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '5'	Display all available books in the database and following message "Do you want to update any existing book details? Y/N"	Pass	
03	Input 'y'	Display "Enter the book ID you want to update "	Pass	
04	Input '28'	Display "Book ID : Existing book ID is (28) : Enter the new ID :"	Pass	
05	Input '28'	Display " Book category : Existing book category is (English) : Enter the new category here :	Pass	

06	Input 'new category'	Display " Book name : Existing book name is (IT for management) : Enter the new book name here :	Pass	
07	Input 'new book name'	Display " Book description : Existing book description is (abcd xyz) : Enter the new book description here :	Pass	
08	Input 'new description'	Display " Book publisher : Existing book publisher is (Willey) : Enter the new book publisher here :	Pass	
09	Input 'new publisher'	Display " Price of the book : Existing book price is (\$99.99) : Enter the new price here :	Pass	
10	Input 'new price'	Display " Quantities in the store : Existing quantities are (7) : Enter the new quantities here :	Pass	
11	Input 'new quantities'	Display "Book details updated successfully" "Press any key to continue"	Pass	
12	Input 'Return' key	Navigate back to update menu	Pass	

Post-conditions & Comments

No errors found. System is logged in to admin functions. Menu navigations are working properly. Specific book details are updated successfully.

Test Case W046

Test Case ID	W046
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	Black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	Display & update by book ID

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '5' to execute	Display update function menu	Pass	
02	Input '5'	Display all available books in the database and following message "Do you want to update any existing book details? Y/N"	Pass	
03	Input 'abcd'	Display "Please enter a valid input" "would you like to try again? Y/N"	Fail	Display "Please enter a valid input" But navigate back to update menu

04	Input '5'	Display all available books in the database and following message "Do you want to update any existing book details? Y/N"	Pass	
05	Input '473'	Display "Entered book ID not found in the list " "Would you like to try again? Y/N"	pass	
06	Input 'abcd'	Display "Please enter a valid input" "would you like to try again? Y/N"	Fail	Display "Please enter a valid input" But navigate back to update menu
07	Input 'n'	Display "press any key to continue"	Pass	
08	Input 'Return' key	Navigate to update menu	Pass	
09	Input '0'	Display "press any key to continue"	Pass	
10	Input 'Return' key	Navigate to admin menu	Pass	

Post-conditions & Comments

System is logged in to admin functions. Menu navigation is confused while invalid input to Y/N selection. Yet update function can be repeated from the update menu again.

Test Case W047

Test Case ID	W047
System	WISDOM Enquiry System
Sub System	Admin function
Test Method/Technique	White & black box Technique
Designed by	M.F.M Fazrin
Executed by	M.F.M Fazrin
Execution date	20/02/2016
Short Description	View login report & Exit

Pre-condition

System is logged into admin function, this function can be accessed by only admin privilege users.

Steps	Action	Expected Response	Pass/ Fail	Comments
01	Input '7' to execute	Display View login report function menu	Pass	
02	Input '1'	Display all Login & Logout date & time information of admins	Pass	
03	Input '2'	Display all Login & Logout date & time information of staffs	pass	
04	Input '3'	Display all Login & Logout date & time information of guests	Pass	
05	Input '4'	Display Total duration of usage by admins	pass	
06	Input '5'	Display Total duration of usage by staffs	Pass	

07	Input '6'	Display Total duration of usage by guests	Pass	
08	Input '7'	Display Total duration of overall usage	Pass	
09	Input '8'	Delete all login records	Pass	
10	Input 'abcd'	Display "Invalid entry try again" "Select an option from the above menu"	Pass	
11	Input '7'	Display "No login reports found" "Press any key to continue"	Pass	
12	Input 'Return' key	Navigate to Admin menu	Pass	
13	Input '0'	Display "Dear Admin of Wisdom!!! You have spent xx minute's yy seconds..... Press any key to continue"	Pass	
14	Input '0'	Display "Total time Xx minutes yy seconds" "Welcome again" Press any key to continue	Pass	
15	Input 'any' key	Terminate the system	Pass	

Post-conditions & Comments

System is logged in to admin functions. Menu navigations are working properly. All the functions perform accurately. No errors found.

Test Specification and Test summary report

In above test cases both white box technique and black box technique is implemented for most cases, so far from all tests while black box technique testing inputting an invalid format for character input (Ex: Inputting more than one letter for Y/N selection) will end up with in menu navigation issues, but this problem doesn't force to terminate the program, function can be recovered by proper inputs as per instructions, while all other invalid inputs (Ex: Entering a string for integer input request) program navigates to proper error information and continue smooth flow of system. White box technique works properly as per expected response.

Above testing cases fulfilled the following tasks of the test plan.

- 01) Features to be tested**
- 02) Features not to be tested**
- 03) Testing Techniques**
- 04) Approach – Functional Testing**
- 05) Item Pass/Fail Criteria**

Following tasks will be tested by the users & theirs feedbacks & comments will be taken to consider through software evaluation form

Non Functional Testing

- 01) Performance Testing
- 02) Security Testing
- 03) Usability Testing
 - i) Learnability test
 - ii) Efficiency test
 - iii) Satisfaction test
 - iv) Memorability test
 - v) Error test
- 04) Compatibility test
- 05) Environmental needs
- 06) Staffing and training needs

Sample of Software Evaluation Form**Software Evaluation Form****User Name:****Profession:****Age (optional):****Please answer the following questions by 'Y' for yes & 'N' for no**

WISDOM ENQUIRY SYSTEM	
Criterion	Y / N
Is the level of language that the program offers clearly indicated?	
Is it easy to start the program?	
Is the user interface easy to understand?	
Is it easy to navigate through the program?	
Are menus that are used to assist navigation (e.g. back to the homepage, exit) clear and intelligible?	
Is it always clear to the learner which point s/he has reached in the program?	
Does the program branch to remedial routines?	
Are the grammar and vocab used in the program accurate?	
At any time were you unsure how to proceed to next step?	

Please give your rating for following questions out of 5

Questions	Rating
How user-friendly is our program's interface?	
How successful is our program in performing its intended task?	
How likely are you to recommend our program to others?	
Comfortable of using the program	
How much this system is secured	
How much easier to learn this program by beginner	
Program Accuracy and free of bugs	
Overall satisfaction	

Any Other Comments or Feedback

From the user feedback following decisions will be derived

- 01) If it is required to train the beginners to use this system, which functions need to be trained.
- 02) If there any issues occurred while using this system in different operating systems and different types of hardware environment, how to solve those issues and overcome.
- 03) If system have any performance issues, how to solve them
- 04) If system contains any bugs or errors, how to modify the system to prevent those bugs and errors
- 05)