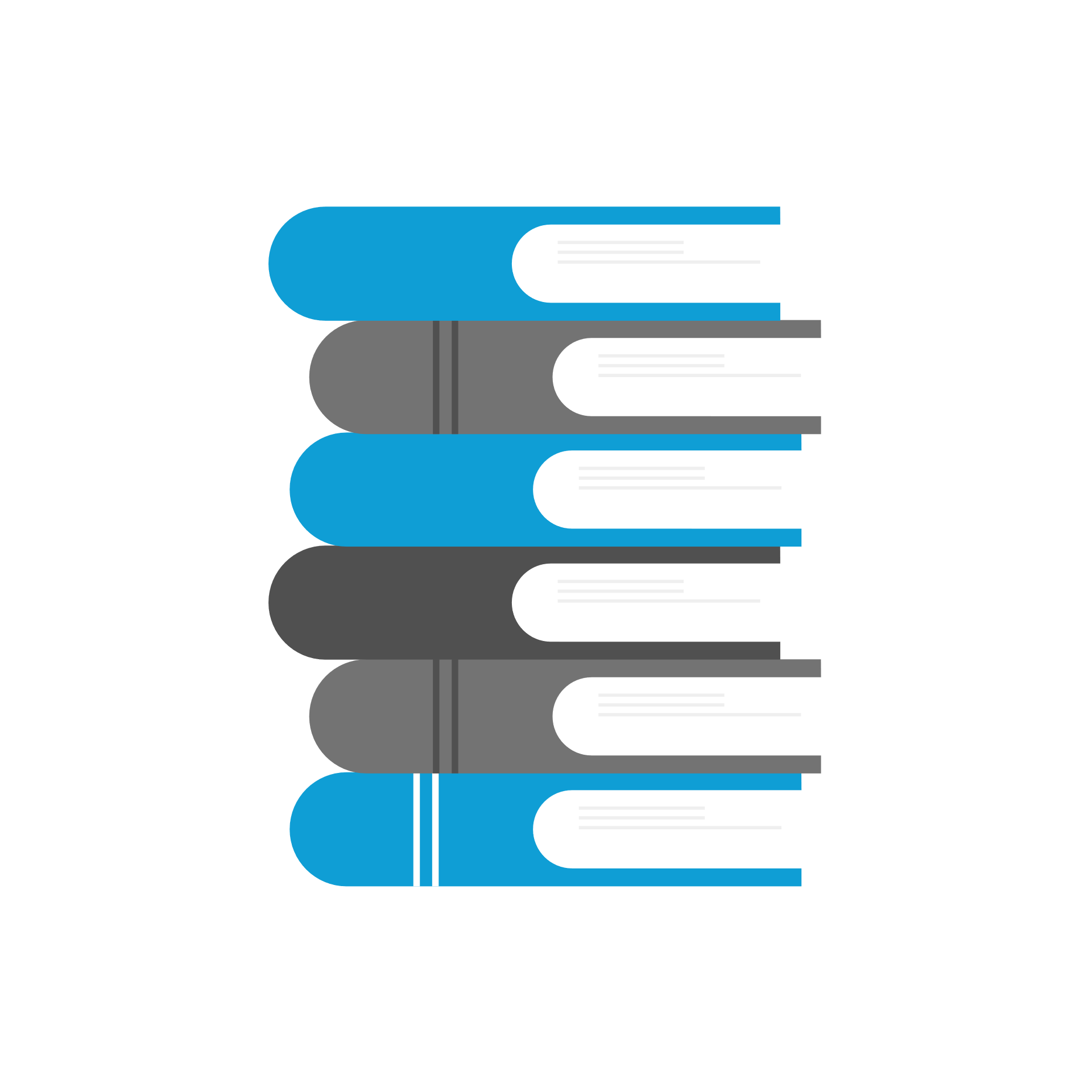
**A Python Console-based Application**



**For a Bookstore**

**By Yasir Chowdhury (Albany Beck)**

Contents

[**Objective** 3](#_Toc160440907)

[**Our Envisioned Idea** 4](#_Toc160440908)

[4](#_Toc160440909)

[**How Our System Works** 5](#_Toc160440910)

[Logging in 5](#_Toc160440911)

[Creating an Account 5](#_Toc160440912)

[Continuing as a Guest 5](#_Toc160440913)

[Searching for Books 5](#_Toc160440914)

[Viewing all Books 5](#_Toc160440915)

[Adding to Basket 5](#_Toc160440916)

[Viewing Basket 5](#_Toc160440917)

[Purchasing 5](#_Toc160440918)

[Order History 5](#_Toc160440919)

[Viewing Account Details 5](#_Toc160440920)

[Modifying Account Details 5](#_Toc160440921)

[Logging Out 5](#_Toc160440922)

# **Objective**

We have been asked to design and implement a web-based application for a bookstore. Theapplication will be made available for two user groups: Registered User and Unregistered User. Each user group is to have access to their own facilities and interlinked functionalities. Unregistered users can view a Book Store but cannot access all the facilities and featurescompared to those a Registered User has.

Faclities provided to the unregistered user are:

* Ability to search Books
* Ability to view list of books displayed by the application
* Ability to read book information (Overview, Authors, etc)
* Ability to add book to shopping basket
* Ability to view the shopping basket
* Ability to modify the shopping basket
* Ability to choose to proceed and checkout option

Additional facilities provided to the registered user are:

* Ability to access order history
* Ability to view account details
* Ability to modify account details such as firstname, lastname, email id and password
* Ability to purchase books

Further details for an Unregistered and Registered UsersAn Unregistered User can view list of books and just look and read the basic bookdetails provided. After that if the user is interested then the user can register with Book Store. The registration process prompts the user to input all necessary details to register like first name, lastname, email id and password. After registration, the user will have a unique email id and a password for logging in to the Book Store. Registered Users have a search optionto search books by giving the name of the author(s) or the ISBN of the book. Registered Users can add books to shopping basket and also purchase them.

# **Our Envisioned Idea**

# 

**View Basket**

**View All Books**

**V**

**Exit**

**Exit**

**Purchase**

**View Basket**

**Add to Basket**

**View All Books**

**Search Books**

sVv

**Continue as Guest**

**Enter Password**

**Enter Username**

**Login**

**Continue As Guestnu**

**Create Account Menu**

**Login Menu**

**Main Menu**

**Create an Account**

**Enter First Name**

**Enter Last Name**

**Enter Email**

**Create Password**

**Registered User Menu**

**Search Books**

**Add to Basket**

**Logout**

**Account Details**

**Purchase**

**Order History**

# **How Our System Works** +Create flow charts for each

## Logging in

The user will be given it’s three first choices, one of them being the choice to log into their account. If they have a login details, this will be stored in a external text file. For login to be successful, the login details in which the user will enter, will have to match the login details written in the text file. This will allow the user to proceed to the registered user menu which has more accessibility than a guest menu

The Registered Menu includes the options to:

* Search Books
* View all Books
* View Basket
* Add to Basket
* Purchase Books
* View Order History
* View Account Details
* Modify Account Details
* Logout

These will be explained seperately in the following sections

Failing to login will create a loop which will allow the user to try again, the user will have the option to exit the loop, which will return them back to the main menu. The main menu will allow other options such as creating an account, continuing as a guest, or exiting the website.

Creating an Account

A user who wants to create an account will be asked:

* Their first name
* Their last name
* Their email
* And their chosen password

Using bcrypt, the password has been encrypted so it is safe from being hacked.

bcrypt.hashpw(password.encode('utf-8'), bcrypt.gensalt()) hashes the password.

bcrypt.gensalt() generates a salt for hashing, enhancing security.

bcrypt.checkpw(password.encode('utf-8'), saved\_hashed\_pw.encode('utf-8')) checks if the entered password matches the stored hashed password

This has been tested with test accounts to see if the registered\_users file contains encrypted passwords

## Continuing as a Guest

Continuing as a guest is an option available to those who do not wish to register. This is usually for one-time users or users who want to get in and out as fast as possible. Clicking this option will lead the user into a guest menu, which will have restricted accessibility.

The Guest Menu includes the options to:

* Search books
* View All Books
* Add to Basket
* View Basket
* Purchase Books
* Exit to Main Menu

To continue with checkout i.e purchase, the user will be asked to login to continue. This ensures that only registered users can purchase

## Searching for Books

Both registered and unregistered users have the ability to search for books. The user will be asked to enter book title or author to search. The exact book title does not have to be inputted. One word can filter out all the books which contain the inputted name. Similarly, the authors first name can be used assuming the author has a unique name within the list. All the books according to the search wll be listed

## Viewing all Books

This option simply lists all available books in the store for the user to see.

## Adding to Basket

By clicking this option, the user will be asked to enter the book title to add to the basket. It also has the option to return back to the previous menu. Above this print, all books will be listed above so the user can correctly reference the books when adding to basket. The user does not need to worry about inputting the correct letter case, since book title will not be case-sensitive

Once added to basket, the application will return, “added to basket succesfully”.

If book cannot be found, the user will be told “book not found”

The user can add multiple books without being returned back to the previous menu, the user will have to specifically type ‘exit’ to return to the previous menu

## Viewing Basket

Viewing the basket simply allows the user to view his basket, however if basket is empty, the user will be told “basket is empty”. The books will be listed in rows

## Purchasing

Only the registered user will be allowed to purchase the books which are in the basket. If there are no books in the basket, then the application will print. “no books in basket”.

If there are books in the basket and the user wishes to purchase, the application will print “Are you sure you would like to purchase the items in your basket?

Choosing ‘Yes’ will print “purchase completed successfully”

Choosing ‘No’ will print “purchase cancelled, returning to registered menu”

## Order History

Order history will return the books which were previously purchased by the registered user. If the user has not purchased anything, the application will print “Your order history is empty”

## Viewing and Modifying Account Details

Viewing account details will allow the user to view their account details, they can also modify the details however they will be logged out, and will have to login again for security reasons.

When modifying the account details, user will be asked to enter current password.

## Logging Out

This option will lead the user to the main menu

A screenshot of a computer screen

Description automatically generated