

## **Book Store Management System**



Session: 2021 – 2024

### **Submitted by:**

Laiba Arif

2021-CS-173

### **Supervised by:**

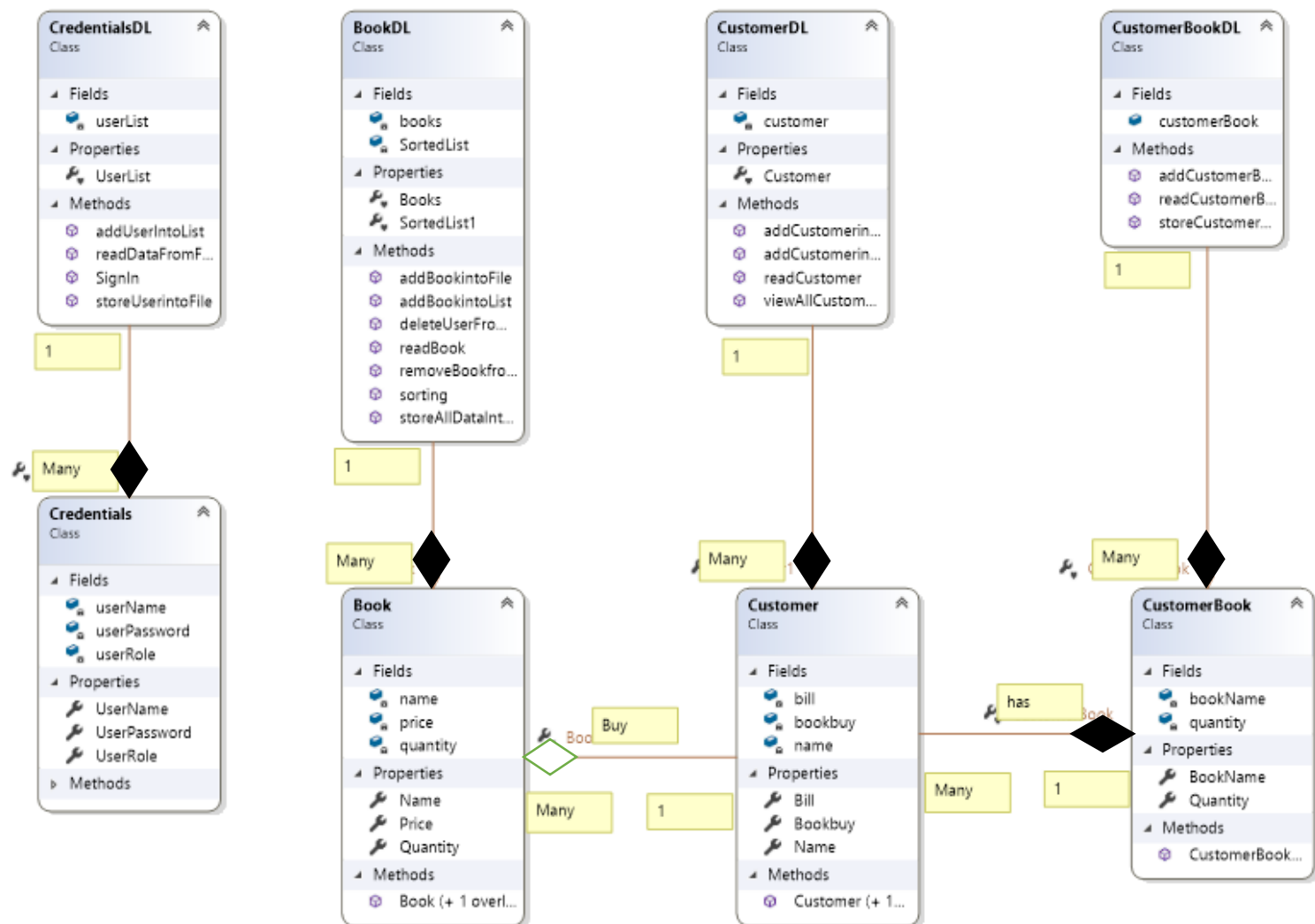
Maida Shahid

Department of Computer Science

**University of Engineering and Technology**

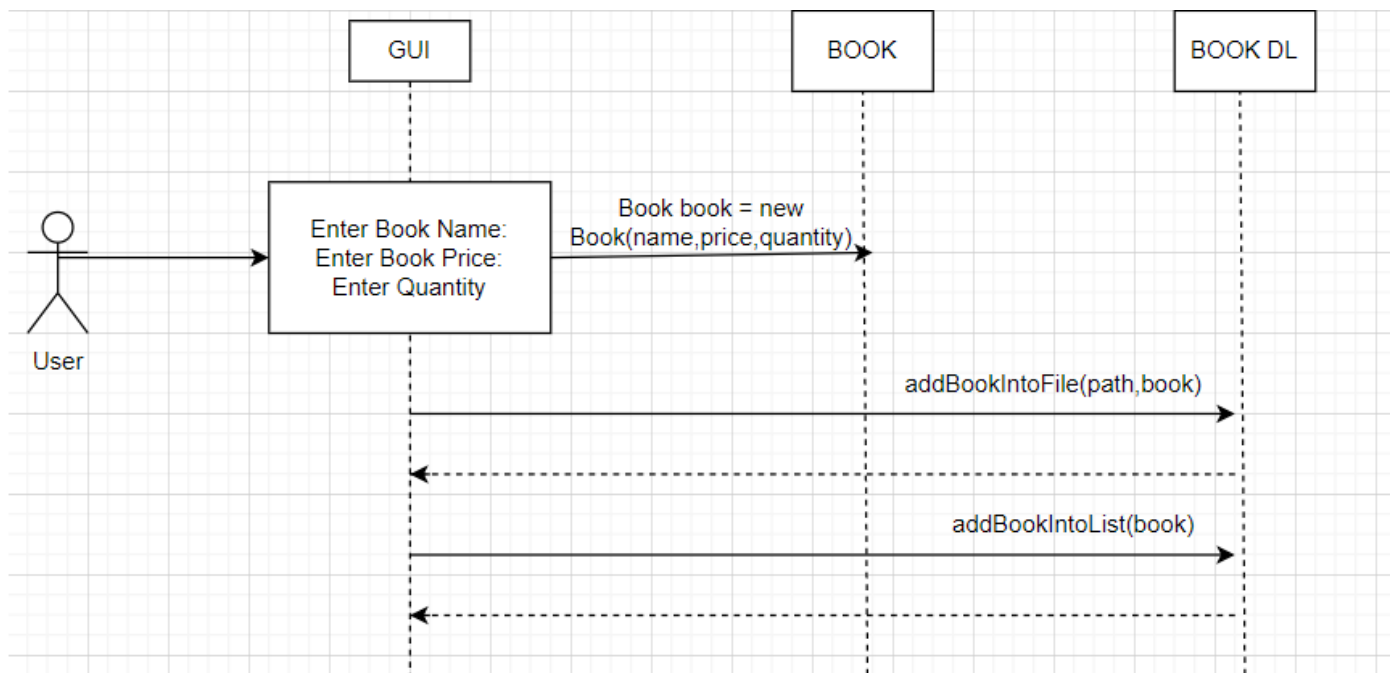
**Lahore Pakistan**

## Class Diagram

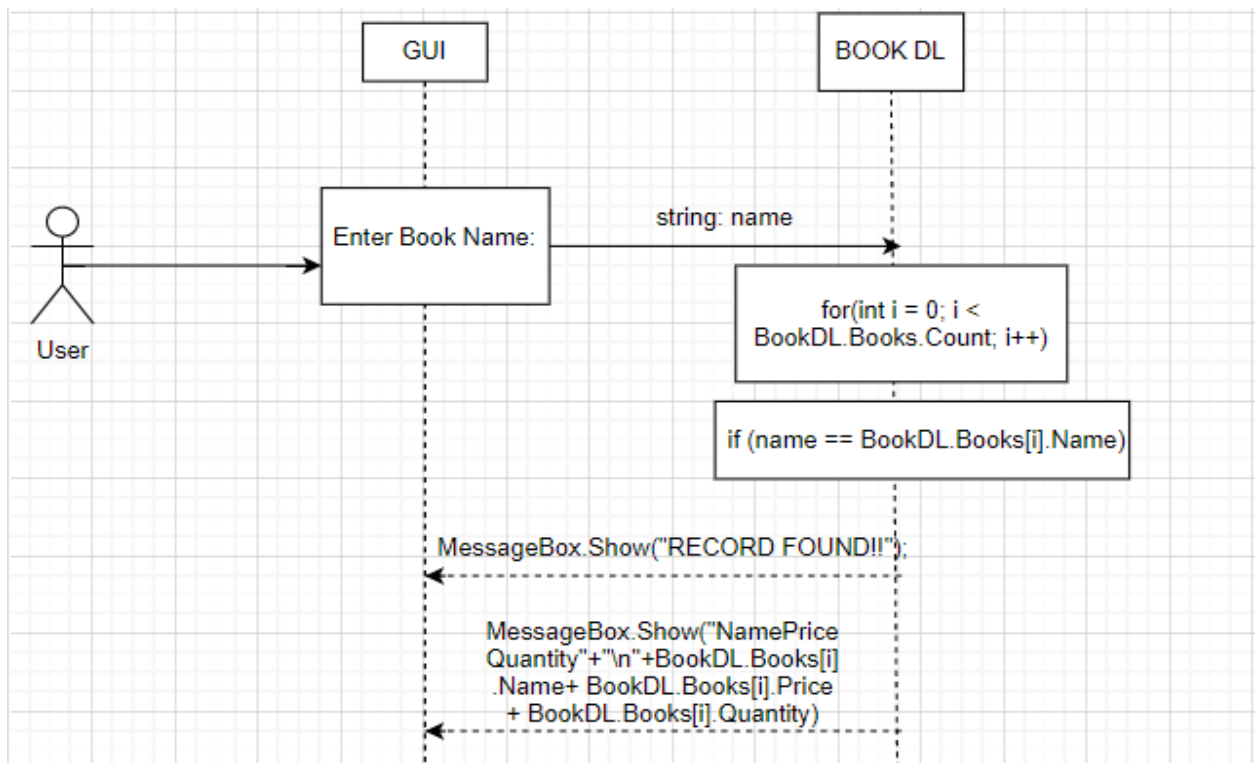


## Sequence Diagram

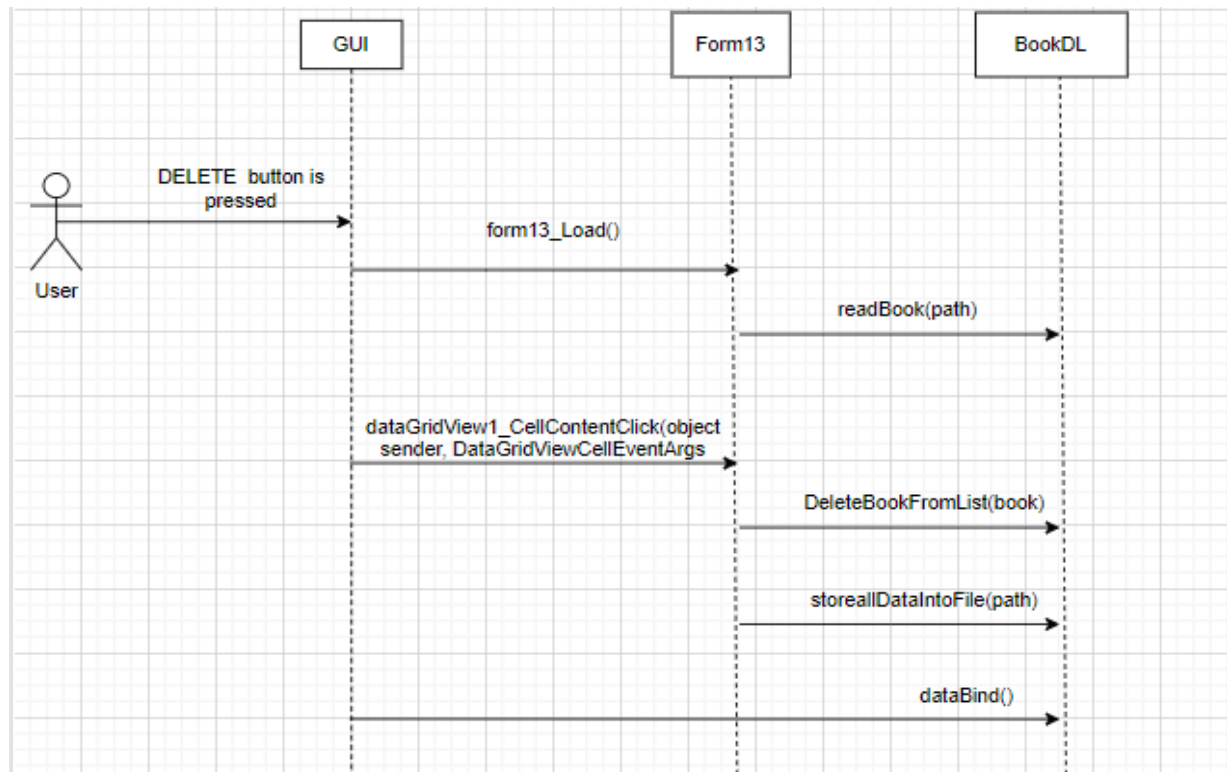
### ○ Add Book



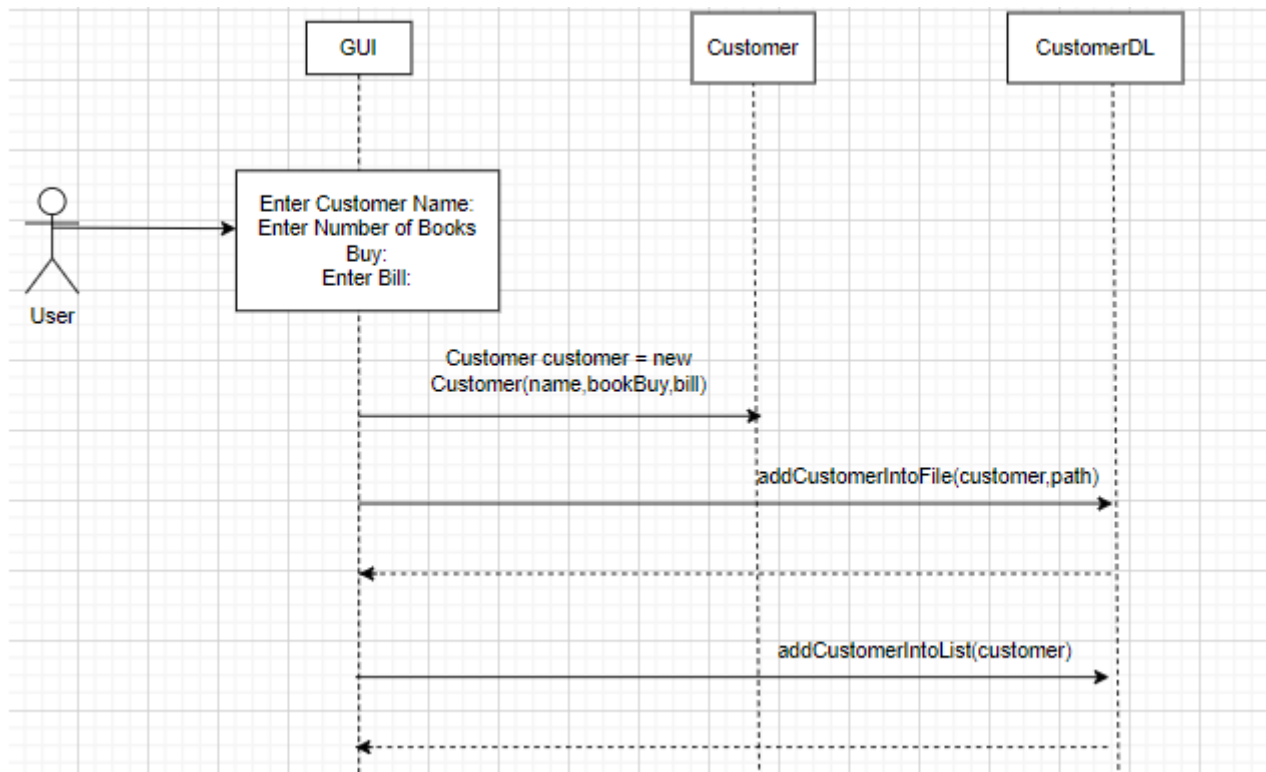
### ○ Search Book



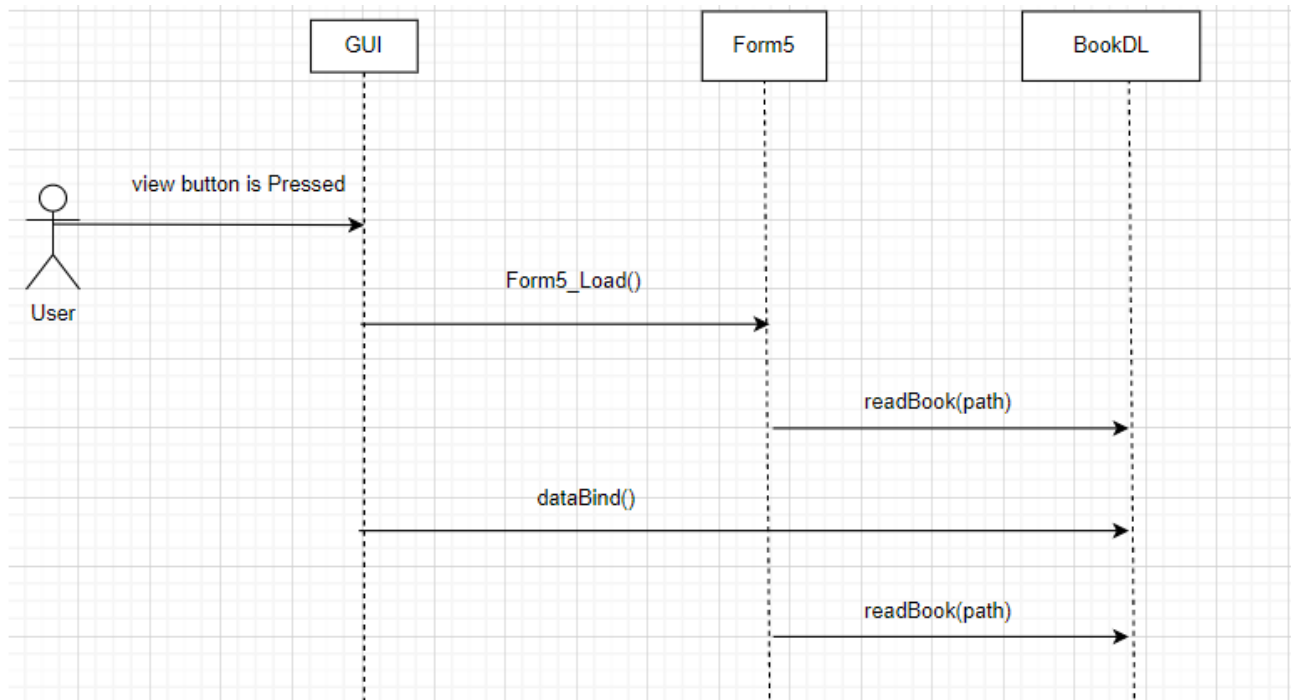
## ○ Delete Book



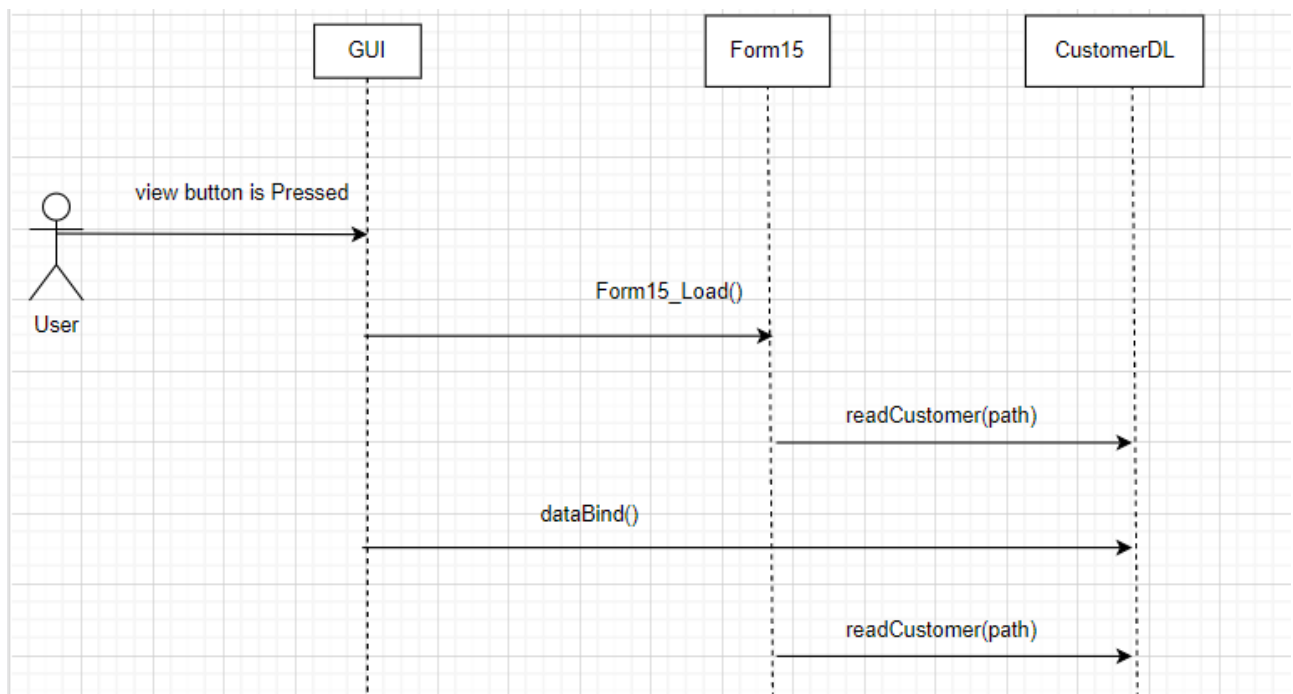
## ○ Add Customer



## ○ View Book

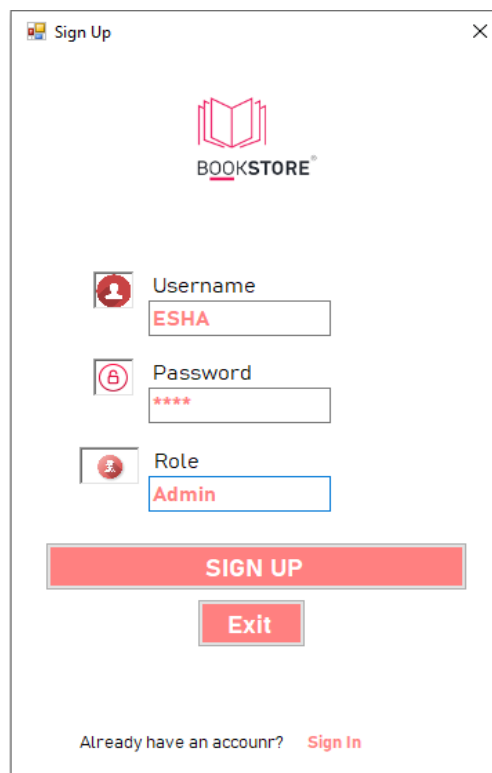


## ○ View Customer



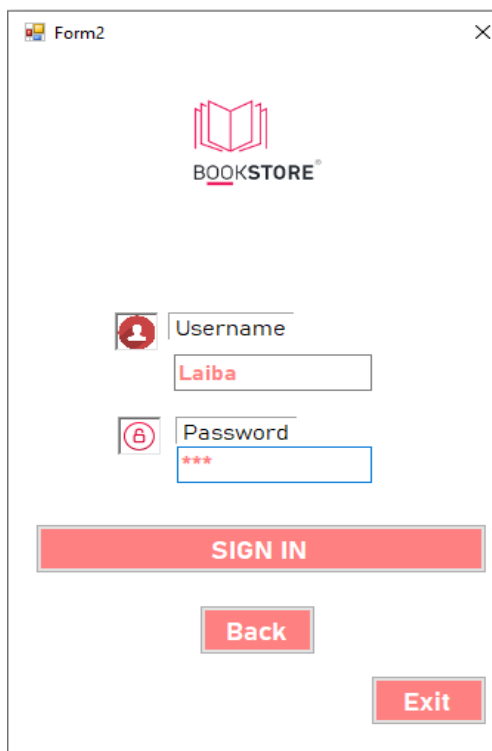
## Wireframes

### >> Sign Up



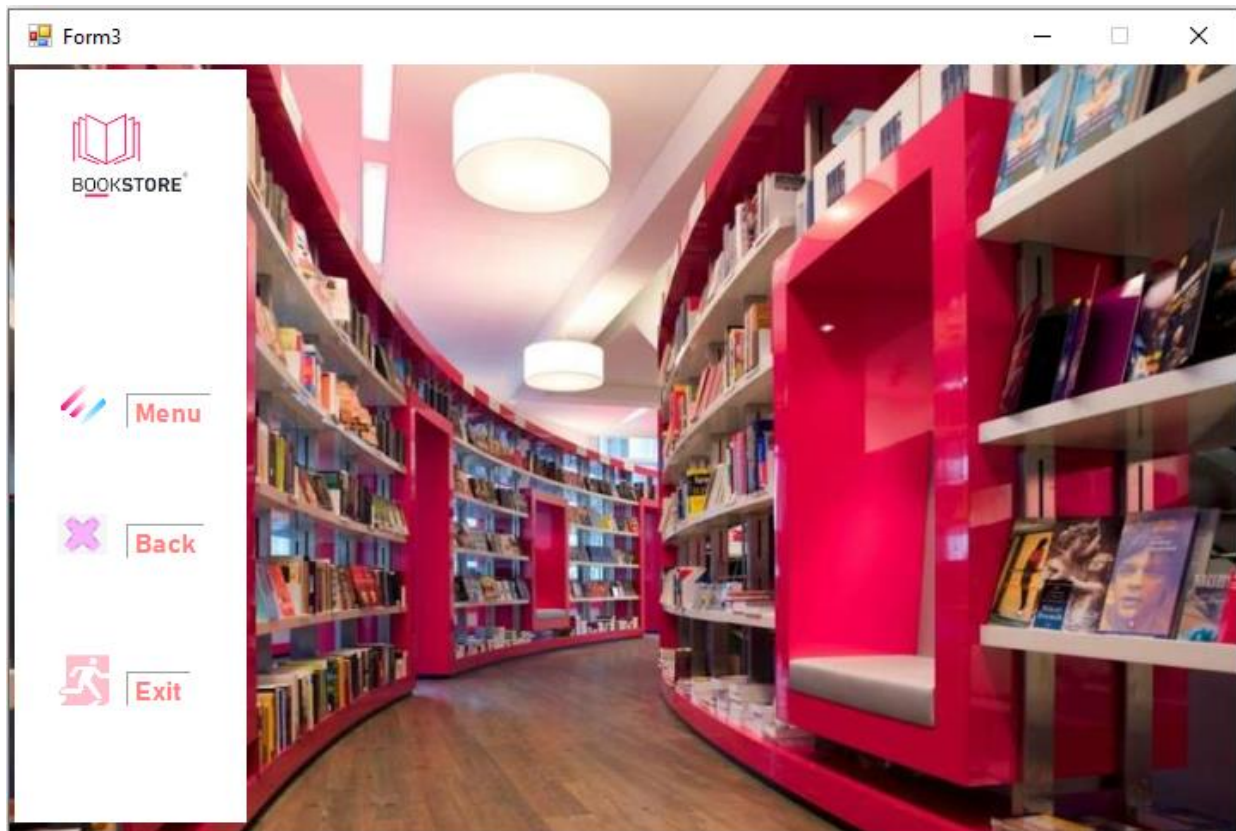
A wireframe for a 'Sign Up' window titled 'Sign Up' with a close button (X). The window features the 'BOOKSTORE' logo at the top. Below the logo are three input fields: 'Username' with a person icon, 'Password' with a lock icon, and 'Role' with a person icon. The 'Username' field contains the text 'ESHA', the 'Password' field contains '\*\*\*\*', and the 'Role' field contains 'Admin'. Below these fields are two buttons: a large red 'SIGN UP' button and a smaller red 'Exit' button. At the bottom, there is a link that says 'Already have an account? Sign In'.

### >> Sign In

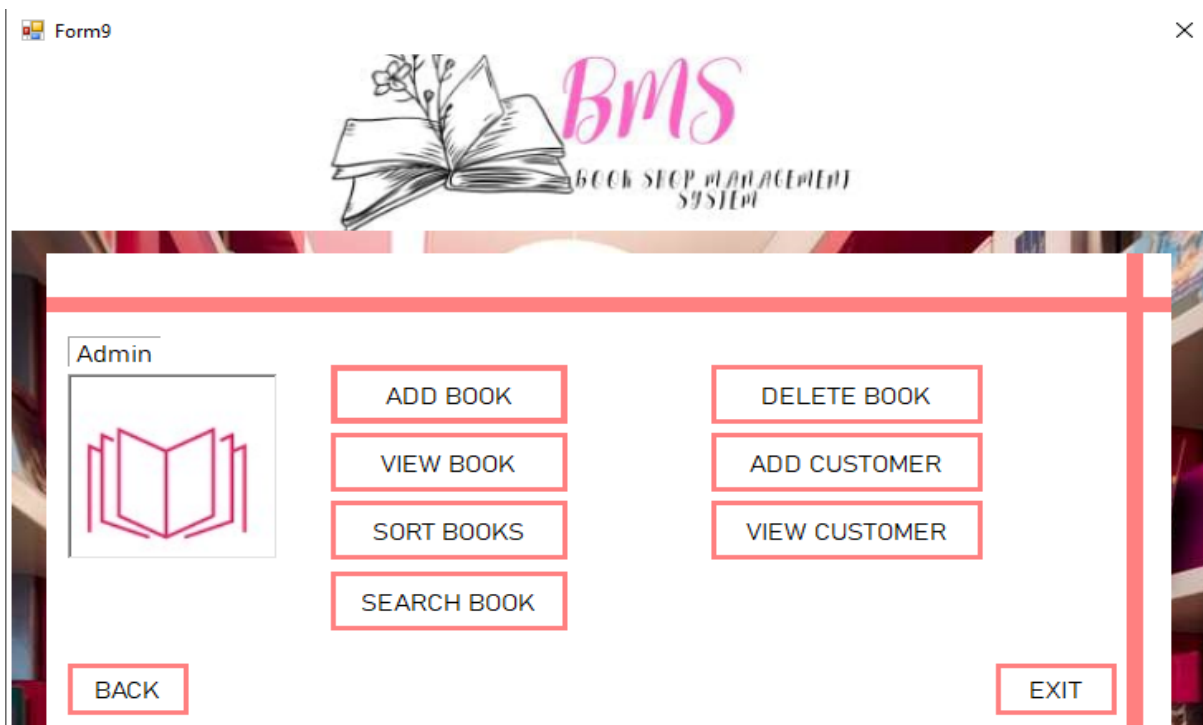


A wireframe for a 'Sign In' window titled 'Form2' with a close button (X). The window features the 'BOOKSTORE' logo at the top. Below the logo are two input fields: 'Username' with a person icon and 'Password' with a lock icon. The 'Username' field contains the text 'Laiba' and the 'Password' field contains '\*\*\*'. Below these fields are three buttons: a large red 'SIGN IN' button, a smaller red 'Back' button, and a smaller red 'Exit' button.

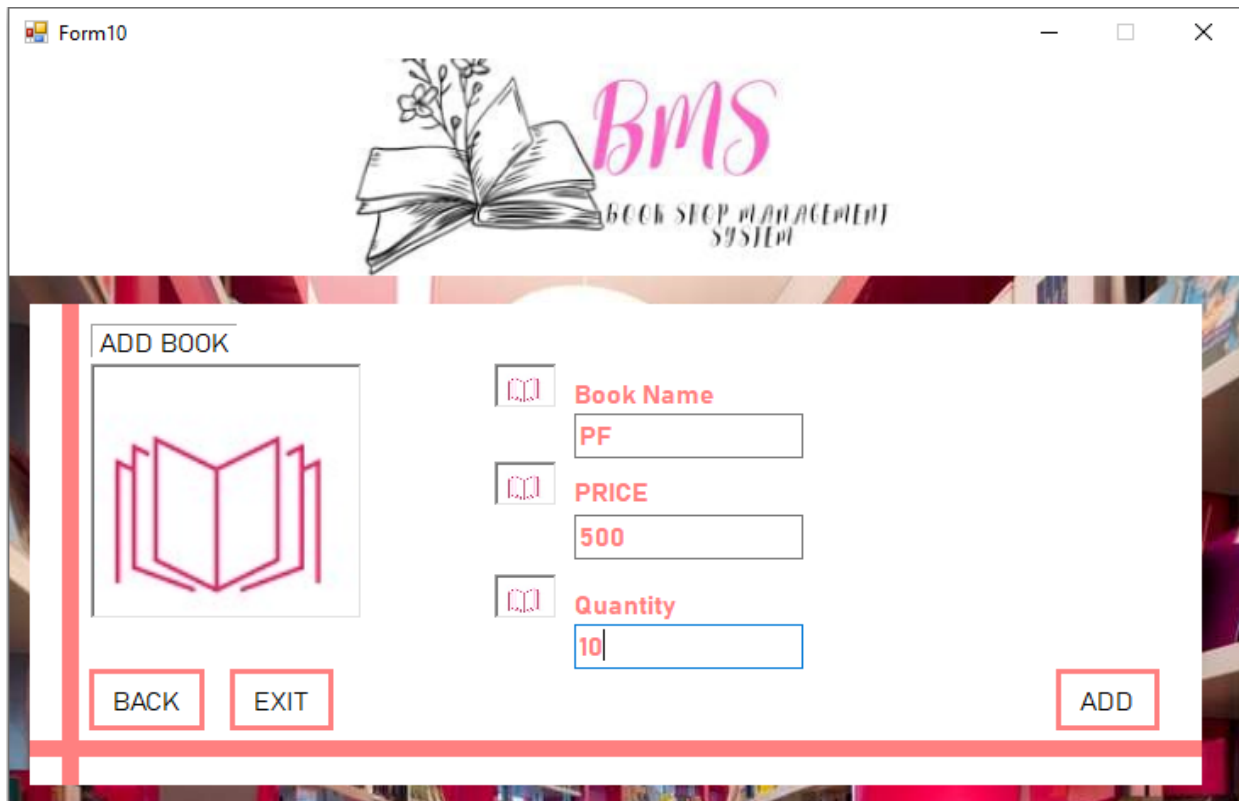
## >>Admin Menu



## >> Menu




## >> Add Book





Form10

**BMS**  
BOOK STOCK MANAGEMENT SYSTEM

**ADD BOOK**

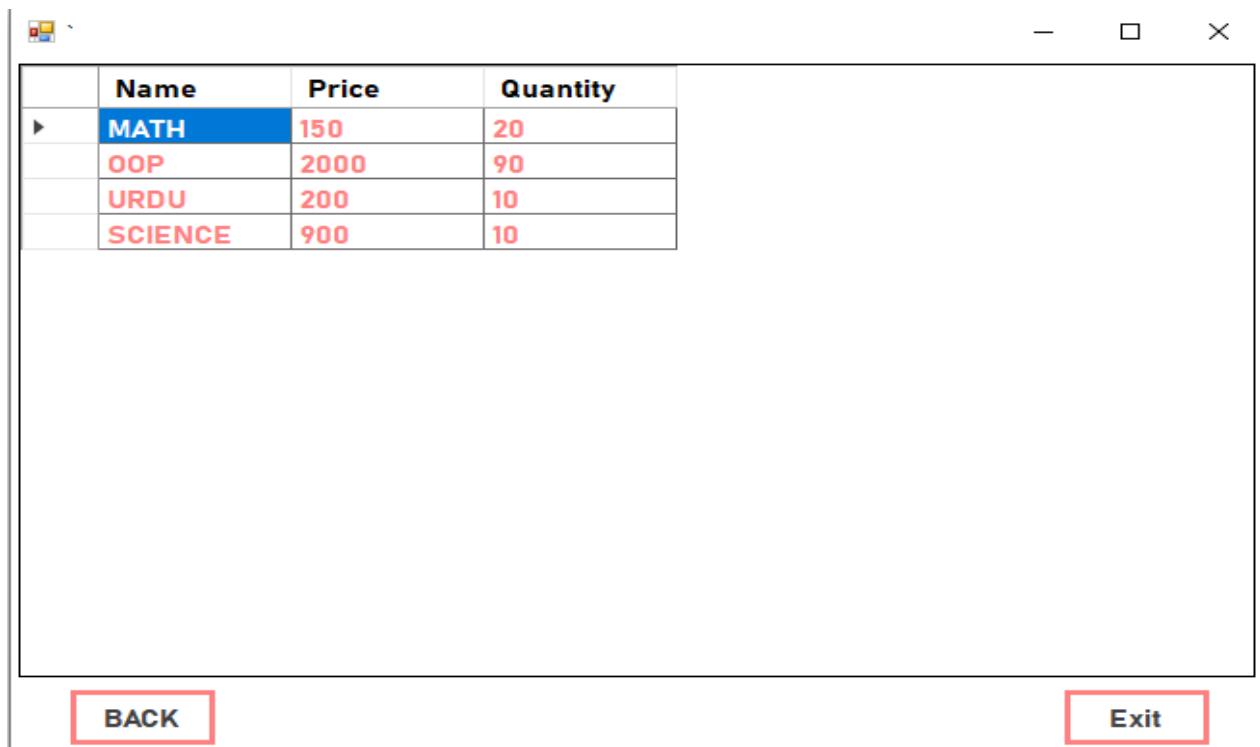
 **Book Name**  
PF

 **PRICE**  
500

 **Quantity**  
10

BACK EXIT ADD

## >> View Book



	Name	Price	Quantity
▶	MATH	150	20
	OOP	2000	90
	URDU	200	10
	SCIENCE	900	10

BACK Exit



## >> Sort Books


Form11

	Name	Price	Quantity
▶	OOP	2000	90
	SCIENCE	900	10
	URDU	200	10
	MATH	150	20


BACK

## >> Search Book

Form12



Search book

 **Book Name**

OOP

SEARCH

RECORD FOUND!!

OK

BACK

EXIT

## >> Delete Book


Form1

Delete	Name	Price	Quantity
Delete	MATH	150	20
Delete	OOP	2000	90
Delete	URDU	200	10
Delete	SCIENCE	900	10


BACK EXIT


## >> Add Customer


Form14




ADD CUSTOMER



 **Customer Name**  
Zoha

 **Number Of Books Buy**  
1

 **Bill**  
500

BACK EXIT ADD

## >> View customer


Form15

	Name	Bookbuy	Bill
▶	ALI	100	1
	LAIBA	1	100
	AIZA	200	2
	HAMZA	2	200
	Laiba	2	1000
	Ayesha	1	100
	Laiba	1	1000
	Zoha	1	500

BACK Exit

## >> Customer Menu

Form4



Customer

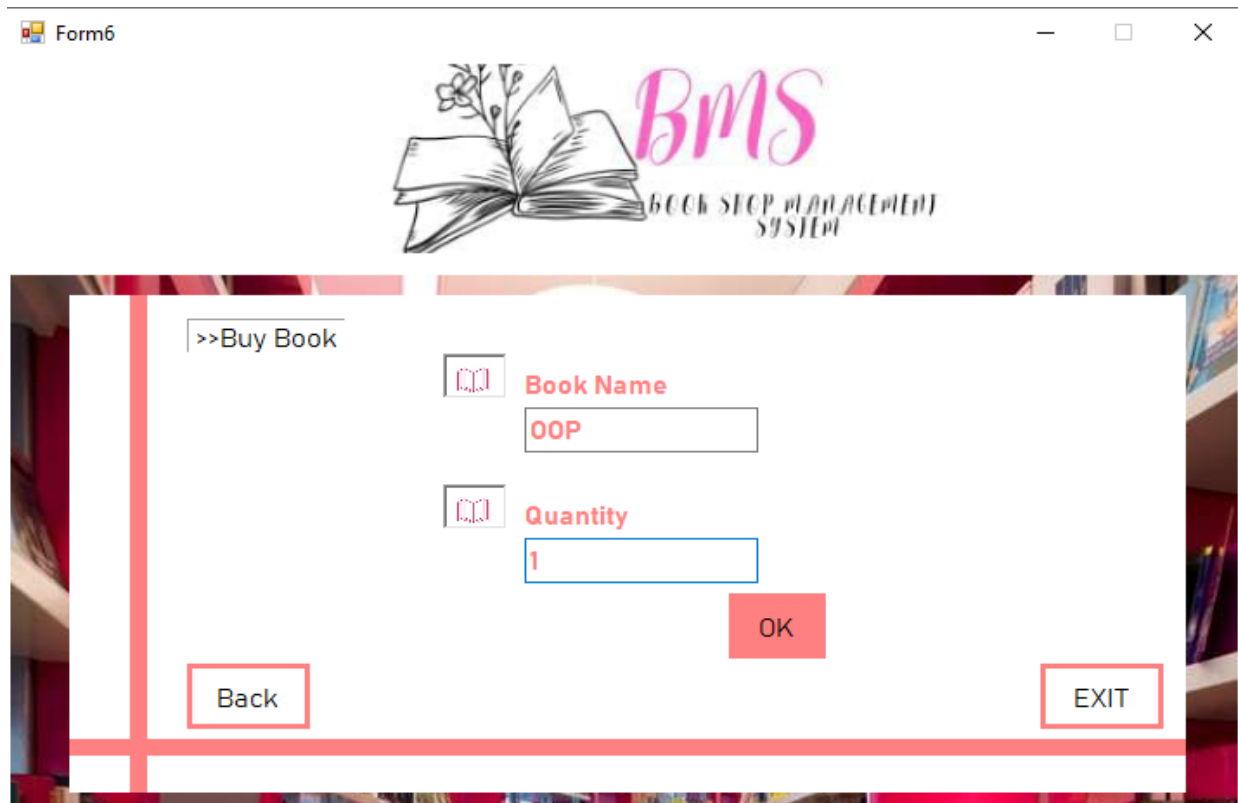
View Books

Buy Books

Return Books

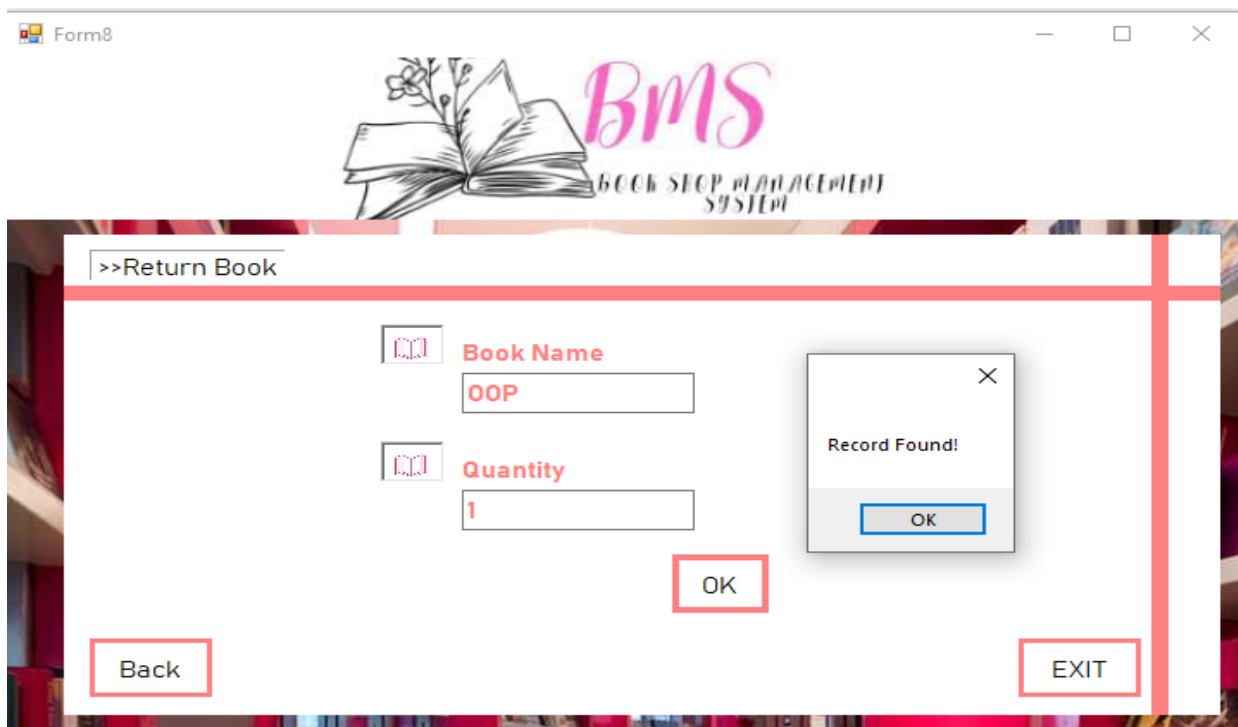
EXIT

## >> Buy Book



The screenshot shows a window titled 'Form6' with the BMS logo at the top. The logo features a drawing of an open book with a flower and the text 'BMS BOOK STORE MANAGEMENT SYSTEM'. The main form area has a title bar '>>Buy Book'. It contains two input fields: 'Book Name' with the value 'OOP' and 'Quantity' with the value '1'. There are three buttons: 'Back' at the bottom left, 'OK' at the bottom center, and 'EXIT' at the bottom right.

## >> Return Book



The screenshot shows a window titled 'Form8' with the BMS logo at the top. The logo features a drawing of an open book with a flower and the text 'BMS BOOK STORE MANAGEMENT SYSTEM'. The main form area has a title bar '>>Return Book'. It contains two input fields: 'Book Name' with the value 'OOP' and 'Quantity' with the value '1'. There are three buttons: 'Back' at the bottom left, 'OK' at the bottom center, and 'EXIT' at the bottom right. A small dialog box titled 'Record Found!' is open over the 'OK' button, with an 'OK' button inside it.

## >> Exit



## Code for Classes

### Form1 Code

```
public partial class Form1 : Form
{
    public Form1()
    {
        InitializeComponent();
        string path = "credentials.txt";
        CredentialsDL.readDataFromFile(path);
    }
    private void button2_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        string path = "credentials.txt";
        string name = textBox1.Text;
        string password = textBox2.Text;
        string role = textBox3.Text;
        Credentials user = new Credentials(name, password, role);
        CredentialsDL.addUserIntoList(user);
        CredentialsDL.storeUserintoFile(user, path);
        MessageBox.Show("User Added!");
        textBox1.Text = "";
        textBox2.Text = "";
        textBox3.Text = "";
    }
}
```

```
    }

    private void label5_Click(object sender, EventArgs e)
    {
        this.Hide();
        Form2 f2 = new Form2();
        f2.Show();
    }
}
```

### Form 2 Code

```
public partial class Form2 : Form
{
    public Form2()
    {
        InitializeComponent();
    }

    private void button2_Click(object sender, EventArgs e)
    {
        this.Hide();
        Form1 f1 = new Form1();
        f1.Show();
    }

    private void clearTextBox()
    {
        textBox1.Text = "";
        textBox2.Text = "";
    }

    private void button1_Click(object sender, EventArgs e)
    {
        string userName = textBox1.Text;
        string password = textBox2.Text;
        Credentials user = new Credentials(userName, password);
        Credentials validUser = CredentialsDL.SignIn(user);
        if (validUser != null)
        {
            string role = validUser.role();
            if (role == "Admin")
            {
                Form3 f3 = new Form3();
                f3.Show();
                this.Hide();
            }
            else if (role == "Customer")
            {
                Form4 f4 = new Form4();
                f4.Show();
                this.Hide();
            }
            else if (role == "Seller")
            {
            }
        }
        else
    }
}
```

```
        {
            MessageBox.Show("Invalid");
        }
        clearTextBox();
    }

    private void button3_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }
}
```

### Form 3 Code

```
public partial class Form3 : Form
{
    public Form3()
    {
        InitializeComponent();
    }

    private void label2_Click(object sender, EventArgs e)
    {
        Form2 f2 = new Form2();
        f2.Show();
        this.Hide();
    }

    private void label3_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }

    private void label1_Click(object sender, EventArgs e)
    {
        Form9 f9 = new Form9();
        f9.Show();
        this.Hide();
    }
}
```

### Form 4 Code

```
public Form4()
{
    InitializeComponent();
}

private void pictureBox2_Click(object sender, EventArgs e)
{
}

private void panel2_Paint(object sender, PaintEventArgs e)
{
}

    private void button1_Click(object sender, EventArgs e)
    {
        Form5 f5 = new Form5();
    }
}
```

```
        f5.Show();
        this.Hide();
    }
    private void button2_Click(object sender, EventArgs e)
    {
        Form6 f6 = new Form6();
        f6.Show();
        this.Hide();
    }

    private void button3_Click(object sender, EventArgs e)
    {
        Form8 f8 = new Form8();
        f8.Show();
        this.Hide();
    }
}
```

### Form 5 Code

```
public partial class Form5 : Form
{
    public Form5()
    {
        InitializeComponent();
    }

    private void Form5_Load(object sender, EventArgs e)
    {
        BookDL.Books.Clear();
        string path = "addbook.txt";
        BookDL.readBook(path);
        dataGridView1.DataSource = BookDL.Books;
    }

    public void dataBind()
    {
        dataGridView1.DataSource = null;
        dataGridView1.DataSource = BookDL.Books;
        dataGridView1.Refresh();
    }
    private void button1_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }

    private void button2_Click(object sender, EventArgs e)
    {
        Form9 f9 = new Form9();
        f9.Show();
        this.Hide();
    }
}
```

### Form 6 Code

```
public partial class Form6 : Form
{
    public Form6()
```



```
{
    InitializeComponent();
}
private void clearTextBox()
{
    textBox1.Text = "";
    textBox2.Text = "";
}
private void button1_Click(object sender, EventArgs e)
{
    bool flag = false;
    string path = "customerBook.txt";
    string name = textBox1.Text;
    float Quantity = float.Parse(textBox2.Text);
    CustomerBook cBook = new CustomerBook(name, Quantity);
    for (int i = 0; i < BookDL.Books.Count; i++)
    {
        if (name == BookDL.Books[i].Name)
        {
            CustomerBookDL.addCustomerBookIntoList(cBook);
            CustomerBookDL.storeCustomerBookintoFile(cBook, path);
            Form7 f7 = new Form7();
            f7.Show();
            this.Hide();
            flag = true;
            break;
        }
    }
    if(flag == false)
    {
        MessageBox.Show("Not Available!");
    }
    clearTextBox();
}

private void Form6_Load(object sender, EventArgs e)
{
    string path = "customerBook.txt";
    string pathBook = "addbook.txt";
    CustomerBookDL.readCustomerBook(path);
    BookDL.readBook(pathBook);
}

private void button2_Click(object sender, EventArgs e)
{
    Form4 f4 = new Form4();
    f4.Show();
    this.Hide();
}

private void button3_Click(object sender, EventArgs e)
{
    Application.Exit();
}
}
```

### Form 7 Code

```
public partial class Form7 : Form
```

```
{
    public Form7()
    {
        InitializeComponent();
    }

    private void button2_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }
}
```

### Form 8 Code

```
public partial class Form8 : Form
{
    public Form8()
    {
        InitializeComponent();
    }

    private void button2_Click(object sender, EventArgs e)
    {
        this.Hide();
        Form4 f4 = new Form4();
        f4.Show();
    }

    private void button3_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        bool flag = false;
        string path = "customerBook.txt";
        string name = textBox1.Text;
        for (int i = 0; i < CustomerBookDL.customerBook.Count; i++)
        {
            textBox1.Text = CustomerBookDL.customerBook[i].BookName;
            if (name == CustomerBookDL.customerBook[i].BookName)
            {
                MessageBox.Show("Record Found!");
                Form7 f7 = new Form7();
                f7.Show();
                this.Hide();
                flag = true;
                break;
            }
        }
        if (flag == false)
        {
            MessageBox.Show("Record Not Found!");
        }
        clearTextBox();
    }

    private void clearTextBox()
    {

```

```
        textBox1.Text = "";
        textBox2.Text = "";
    }

    private void Form8_Load(object sender, EventArgs e)
    {

    }

    private void Form8_Load_1(object sender, EventArgs e)
    {
        string path = "customerBook.txt";
        CustomerBookDL.readCustomerBook(path);
    }
}
```

### Form 9 Code

```
public partial class Form9 : Form
{
    public Form9()
    {
        InitializeComponent();
    }

    private void button2_Click(object sender, EventArgs e)
    {
        Form5 f5 = new Form5();
        this.Hide();
        f5.Show();
    }

    private void button11_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }

    private void button10_Click(object sender, EventArgs e)
    {
        Form3 f3 = new Form3();
        f3.Show();
        this.Hide();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        Form10 f10 = new Form10();
        this.Hide();
        f10.Show();
    }

    private void button4_Click(object sender, EventArgs e)
    {
        Form12 f12 = new Form12();
        f12.Show();
        this.Hide();
    }

    private void button5_Click(object sender, EventArgs e)
    {

```

```
        Form13 f13 = new Form13();
        f13.Show();
        this.Hide();
    }

    private void button7_Click(object sender, EventArgs e)
    {
        Form14 f14 = new Form14();
        this.Hide();
        f14.Show();
    }

    private void button8_Click(object sender, EventArgs e)
    {
        Form15 f15 = new Form15();
        f15.Show();
        this.Hide();
    }

    private void button3_Click(object sender, EventArgs e)
    {
        Form11 f11 = new Form11();
        f11.Show();
        this.Hide();
    }
}
```

### Form 10 Code

```
public partial class Form10 : Form
{
    public Form10()
    {
        InitializeComponent();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        string name = textBox1.Text;
        float price = float.Parse(textBox2.Text);
        float quantity = float.Parse(textBox3.Text);
        string path = "addbook.txt";
        Book book = new Book(name, price, quantity);
        BookDL.AddBookintoFile(book, path);
        BookDL.AddBookintoList(book);
        MessageBox.Show("BOOK ADDED!");
    }

    private void button3_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }

    private void button2_Click(object sender, EventArgs e)
    {
        Form9 f9 = new Form9();
        f9.Show();
        this.Hide();
    }
}
```

## Form 11 Code

```
public partial class Form11 : Form
{
    public Form11()
    {
        InitializeComponent();

        private void Form11_Load(object sender, EventArgs e)
        {
            BookDL.sorting();
            BookDL.Books.Clear();
            string path = "addbook.txt";
            BookDL.readBook(path);
            dataGridView1.DataSource = BookDL.SortedList1;
        }
        public void dataBind()
        {
            dataGridView1.DataSource = null;
            dataGridView1.DataSource = BookDL.SortedList1;
            dataGridView1.Refresh();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            Form9 f9 = new Form9();
            f9.Show();
            this.Hide();
        }
    }
}
```

## Form 12 Code

```
public partial class Form12 : Form
{
    public Form12()
    {
        InitializeComponent();

        private void button1_Click(object sender, EventArgs e)
        {
            Application.Exit();
        }

        private void button11_Click(object sender, EventArgs e)
        {
            bool flag = false;
            string name = textBox1.Text;
            for (int i = 0; i < BookDL.Books.Count; i++)
            {
                if (name == BookDL.Books[i].Name)
                {
                    MessageBox.Show("RECORD FOUND!!");
                    MessageBox.Show("Name\t\tPrice\t\tQuantity"+"\n"+BookDL.Books[i].Name + "\t\t" +
BookDL.Books[i].Price + "\t\t" + BookDL.Books[i].Quantity);
                    flag = true;
                    break;
                }
            }
        }
    }
}
```

```
        if (flag == false)
        {
            MessageBox.Show("Not Available!");
        }
        textBox1.Text = " ";
    }

    private void Form12_Load(object sender, EventArgs e)
    {
        string pathBook = "addbook.txt";
        BookDL.readBook(pathBook);
    }

    private void button2_Click(object sender, EventArgs e)
    {
        Form9 f9 = new Form9();
        f9.Show();
        this.Hide();
    }
}
```

### Form 13 Code

```
public partial class Form13 : Form
{
    private string path = "addbook.txt";
    public Form13()
    {
        InitializeComponent();
    }

    public void dataBind()
    {
        usersGV.DataSource = null;
        usersGV.DataSource = BookDL.Books;
        usersGV.Refresh();
    }

    private void Form1_Load(object sender, EventArgs e)
    {
        BookDL.Books.Clear();
        BookDL.readBook(path);
        usersGV.DataSource = BookDL.Books; // introspection
    }

    private void dataGridView1_CellContentClick(object sender, DataGridViewCellEventArgs e)
    {
        Book user = (Book)usersGV.CurrentRow.DataBoundItem;
        if (usersGV.Columns["Delete"].Index == e.ColumnIndex)
        {
            BookDL.deleteUserFromList(user);
            BookDL.storeAllDataIntoFile(path);
            dataBind();
        }
    }

    private void button2_Click(object sender, EventArgs e)
    {
        Form9 f9 = new Form9();
        f9.Show();
        this.Hide();
    }
}
```

```
private void button3_Click_1(object sender, EventArgs e)
{
    Application.Exit();
}
}
```

### Form 14 Code

```
public partial class Form14 : Form
{
    public Form14()
    {
        InitializeComponent();
    }
    private void button2_Click(object sender, EventArgs e)
    {
        Form9 f9 = new Form9();
        this.Hide();
        f9.Show();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        string name = textBox1.Text;
        float bookbuy = float.Parse(textBox2.Text);
        float bill = float.Parse(textBox3.Text);
        string path = "customer.txt";
        Customer customer = new Customer(name, bookbuy, bill);
        CustomerDL.addCustomerintoFile(customer, path);
        CustomerDL.addCustomerintoList(customer);
        MessageBox.Show("BOOK ADDED!");
    }
    private void button3_Click(object sender, EventArgs e)
    {
        Application.Exit();
    }
}
```

### Form 15 Code

```
public partial class Form15 : Form
{
    public Form15()
    {
        InitializeComponent();
    }

    private void Form15_Load(object sender, EventArgs e)
    {
        CustomerDL.Customer.Clear();
        string path = "customer.txt";
        CustomerDL.readCustomer(path);
        dataGridView1.DataSource = CustomerDL.Customer;
    }
    public void dataBind()
    {
        dataGridView1.DataSource = null;
        dataGridView1.DataSource = CustomerDL.Customer;
        dataGridView1.Refresh();
    }

    private void button3_Click(object sender, EventArgs e)
    {

```

```
        Application.Exit();  
    }
```

```
    private void button2_Click(object sender, EventArgs e)  
    {  
        Form9 f9 = new Form9();  
        f9.Show();  
        this.Hide();  
    }  
}
```

### Program Code

```
namespace Book_Store  
{  
    static class Program  
    {  
        /// <summary>  
        /// The main entry point for the application.  
        /// </summary>  
        [STAThread]  
        static void Main()  
        {  
            Application.EnableVisualStyles();  
            Application.SetCompatibleTextRenderingDefault(false);  
            Application.Run(new Form1());  
        }  
    }  
}
```