DATABASE MANAGEMENT SYSTEMS

PROJECT REPORT

DELHI TECHNOLOGICAL UNIVERSITY

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Submitted To: **Submitted By:**

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ACKNOWLEDGEMENT

We take this opportunity to thank all those magnanimous persons who rendered their full services to our work.

It's with lot of happiness we are expressing gratitude to our guide **Dr. Shailender Kumar** in Computer Science & Engineering Department, for timely and kind help, guidance and providing us with most essential materials required for the completion of this project. We are very thankful to our guide for his indomitable guidance. His inspiration up to the last moment had made things possible in a planned manner.

Finally, we thank each and everyone who helped to complete our project work with their cordial support.

Project Associates
Abhinav Lohia
(2K19/CO/015)

Abhinav Lohia

ABSTRACT

Computer is fast emerging as a daily need in walks of life. The knowledge of computers and programming language has become basic Skill need to service in today's information-based society. Every business Institution and the corporate section, make a use of computer for making their operation efficient & effective.

Book Store Management System is the software application to automate all kinds of operations in the book shop. The purpose of this software is to manage the books in the book store. Generally, it includes the Order Processing, Stock Management and Accounts Management. This software is to maintain records of sales, purchase and user records. This project developed using C#.NET as front end and Microsoft SQL Server as Back end. Here I am trying to develop such type system which provides the automation on any type of the bookshop.

The main motive of making this bookshop management system is to ease the work for the bookshop owner who is the admin and the customers who wants to buy the books with as ease as possible. I want to create a GUI based software application which is easy to use and can manage data of users, books and transactions. That means a shop which has the type system which provides the facility to the customers of the shop to purchase the books from the shop without any complexity.

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CERTIFICATE

This is to certify that Project Report entitled **"Bookshop Management System"** which is submitted by **Abhinav Lohia (2K19/CO/015)** in partial fulfillment of the requirement for the award of degree of B.Tech in Department of **Computer Engineering** of **Delhi Technological University**, is a record of the student's own work carried out by her under my supervision. The matter embedded in this report is original and has not been submitted for the award of any other degree.

<div align="right">

Dr. Shailender Kumar
Associate Professor (CSE)
Delhi Technological University

</div>

DECLARATION

I hereby declare that this submission of project report is our own work and that, to the best of our knowledge and brief, it contains no material published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgement has been made in the text.

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CHAPTER-1

Introduction

Book Store Management System is the software application to automate all kinds of operations in the book shop. The purpose of this software is to manage the books in the book store. Generally, it includes the Order Processing, Stock Management and Accounts Management. This software is to maintain records of sales, purchase and user records. This project developed using C#.NET as front end and Microsoft SQL Server as Back end. Here I am trying to develop such type system which provides the automation on any type of the bookshop.

The main motive of making this bookshop management system is to ease the work for the bookshop owner who is the admin and the customers who wants to buy the books with as ease as possible. I want to create a GUI based software application which is easy to use and can manage data of users, books and transactions. That means a shop which has the type system which provides the facility to the customers of the shop to purchase the books from the shop without any complexity.

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

<u>Database and Tables</u>

Hardware Requirements: -

- Pentium-IV(Processor).

- 256 MB Ram

- 512 KB Cache Memory

- Hard disk 10 GB

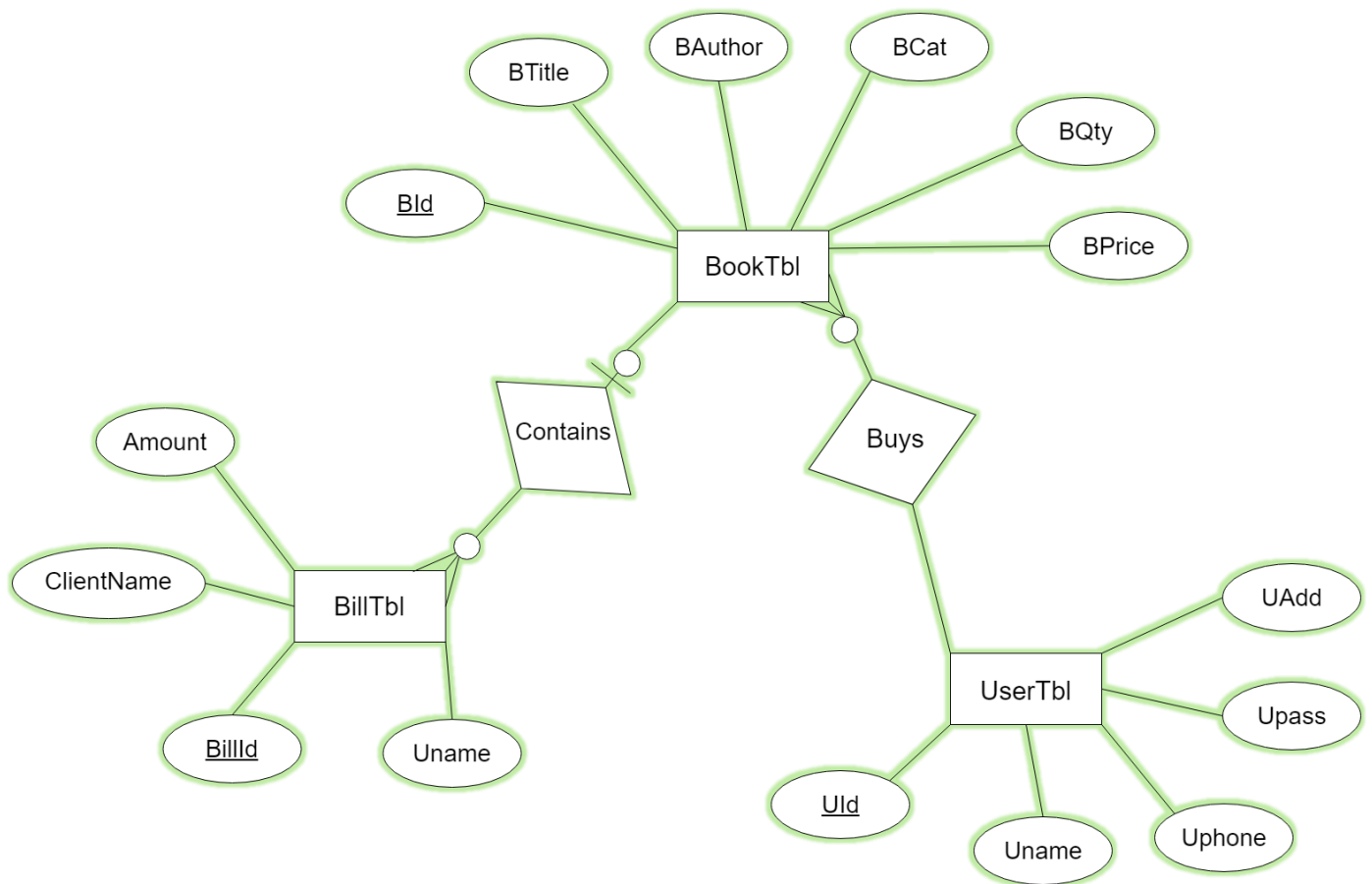- Microsoft Compatible 101 or more Key Board

Software Requirements: -

- Operating System: Windows
- Software: Visual Studio 19
- Language and Framework: C# .Net
- Back-End: Microsoft SQL Server

ER Model: -

Database Name: Book Shop Management System

Table Definition: -

1. BillTbl

BillTbl stores information about the books that customer wants to buy. This table's data is used in creating the bill receipt and forming the statistics on the dashboard screen.

(Query)

```
CREATE TABLE [dbo].[BillTbl] (
    [BillId]     INT          IDENTITY (1000, 1) NOT NULL,
    [UName]      VARCHAR (50) NOT NULL,
    [ClientName] VARCHAR (50) NOT NULL,
    [Amount]     INT          NOT NULL,
    PRIMARY KEY CLUSTERED ([BillId] ASC)
);
```

(Structure)

	Name	Data Type	Allow Nulls	Default
🔑	BillId	int	☐	
	UName	varchar(50)	☐	
	ClientName	varchar(50)	☐	
	Amount	int	☐	
			☐	

dbo.BillTbl [Design]   dbo.BillTbl [Data]   Users.cs [Design]

Update   Script File: dbo.BillTbl.sql

2. BookTbl

BookTbl stores information about all the books that are currently present in our stock. This table's data is used in the buy book section for the customers and forming the statistics on the dashboard screen.

(Query)

```sql
CREATE TABLE [dbo].[BookTbl] (
    [BId]     INT         IDENTITY (100, 1) NOT NULL,
    [BTitle]  VARCHAR (50) NOT NULL,
    [BAuthor] VARCHAR (50) NOT NULL,
    [BCat]    VARCHAR (50) NOT NULL,
    [BCity]   INT          NOT NULL,
    [BPrice]  INT          NOT NULL,
    PRIMARY KEY CLUSTERED ([BId] ASC)
);
```

(Structure)

Name	Data Type	Allow Nulls	Default
⚷ BId	int	☐	
BTitle	varchar(50)	☐	
BAuthor	varchar(50)	☐	
BCat	varchar(50)	☐	
BCity	int	☐	
BPrice	int	☐	
		☐	

3. UserTbl

UserTbl stores information about the users who are currently linked to our bookshop. This table's data is used in creating the bill receipt, login screen and forming the statistics on the dashboard screen.

(Query)

```sql
CREATE TABLE [dbo].[UserTbl] (
    [Uid]    INT         IDENTITY (500, 1) NOT NULL,
    [Uname]  VARCHAR (50) NOT NULL,
    [Uphone] VARCHAR (50) NOT NULL,
    [UAdd]   VARCHAR (50) NOT NULL,
    [Upass]  VARCHAR (50) NOT NULL,
    PRIMARY KEY CLUSTERED ([Uid] ASC)
);
```

(Structure)

	Name	Data Type	Allow Nulls	Default
🔑	Uid	int	☐	
	Uname	varchar(50)	☐	
	Uphone	varchar(50)	☐	
	UAdd	varchar(50)	☐	
	Upass	varchar(50)	☐	
			☐	

CHAPTER-2
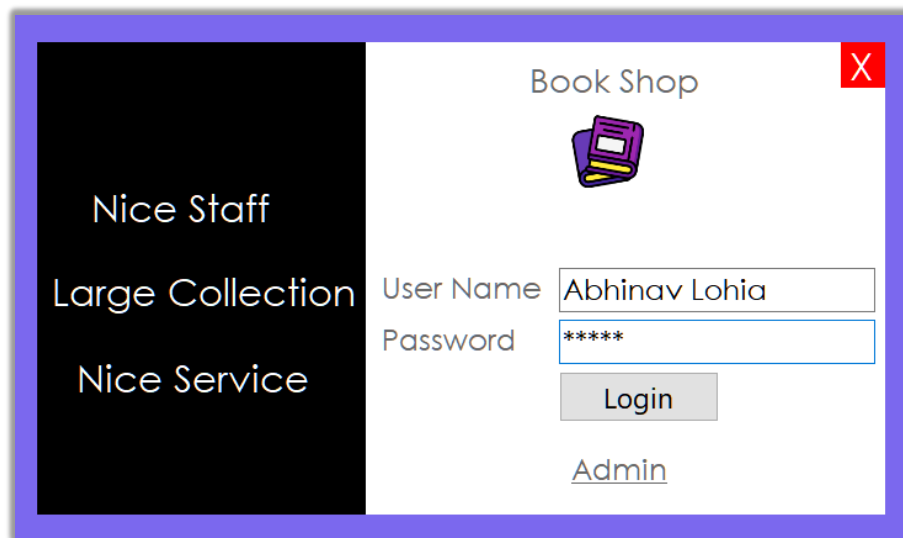
Design and Screens

1. Splash Screen
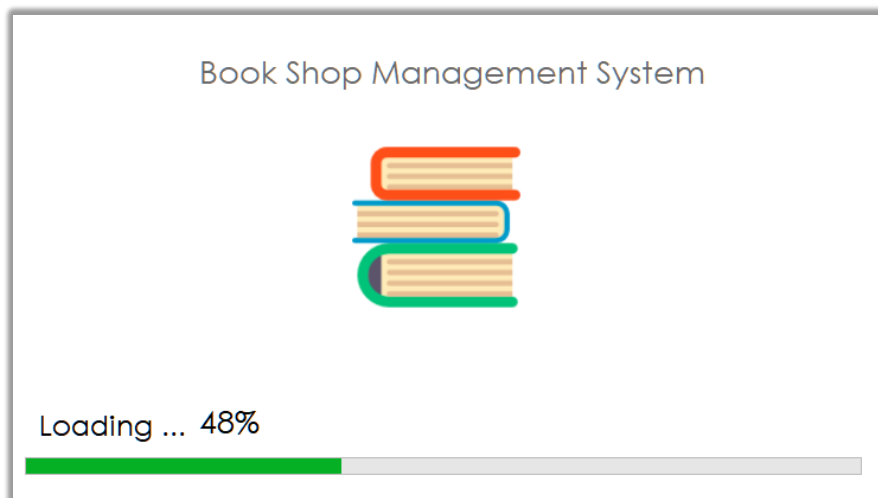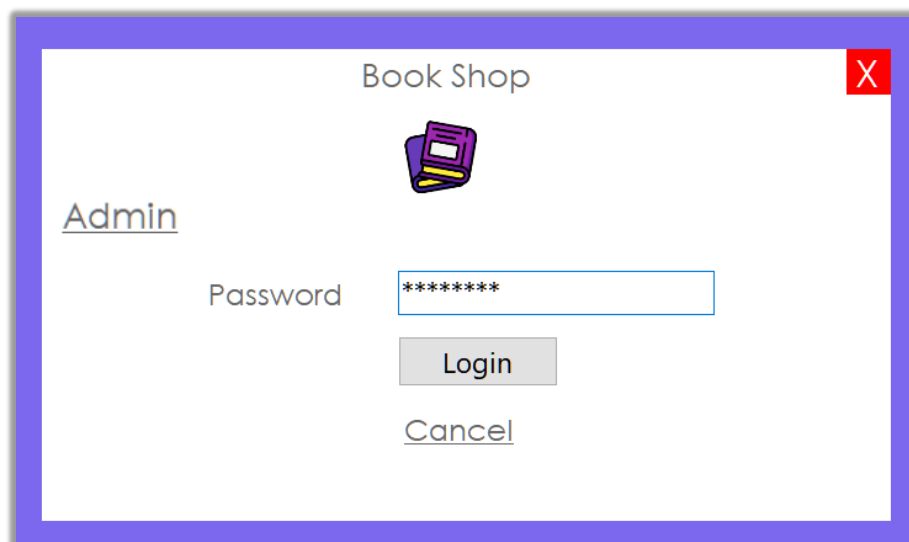
- The splash screen is the first screen that appears when we start the application.

- The progress bar shows the current loading status of the application.

- After 100% the Login screen will be opened.

- It is fully animated.

2. Login Screen

- The second screen is the Login screen by which bookshop customers can login into the bookstore from where they can buy books.

- Username and Password authentication is present in all the input field.

- A different login section for the admin to login into books and customers management page from where he can manage and see all the information about the books and users.

- Admin just needs to enter the password to login into customers management page.

3. Bookshop (Buying Section)

- After successful login by the customer, they land on this buying section of the bookshop.

- This page consists of the Buying form for books, Cart or Book bill, Available book List table, Total Amount, Print Bill Receipt.

- Select any row of the Book List table and it will appear automatically in the Buying Form. Select quantity and enter username and click Add to bill button to add the books in the Books List Table.

- Reset button resets all the entries in the buying form.

- Total price of the books will be shown below bill table.

- Book Bill or Cart contains all the selected book for purchasing.

- Print button will open a new window which will show bill receipt for that customer. The receipt can be printed in normal as well as pdf form.

- Logout button will take us back to login screen.

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4.   Books Section

- After successful login by the Admin, we land on this Books section of the bookshop.

- Add Books input section consists of Book Title, Author, Categories drop down menu, Quantity, Price.

- Save button saves the new book into existing Book List table.

- Edit button can be used to edit one or more data of a specific book.

- Delete button deletes the selected book from the Book List table.

- Reset button resets all the values entered into book input section.

- Book List table shows all the information about all the available books.

- Filter by Category menu can be used to see all the books available of a particular category.

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5. Users Section

- Admin can Add, Update, Delete, users in this page.

- Users input section consists of Username, Phone, Address, Password.

- This Username and Password can be used by the user to login into bookshop for customer page.

- Save button saves the new user into existing User List table.

- Edit button can be used to edit one or more data of a specific User.

- Delete button deletes the selected User from the User List table.

- Reset button resets all the values entered into User input section.

- User List table shows all the information about all the users that are currently linked to our bookshop.

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6. Dashboard
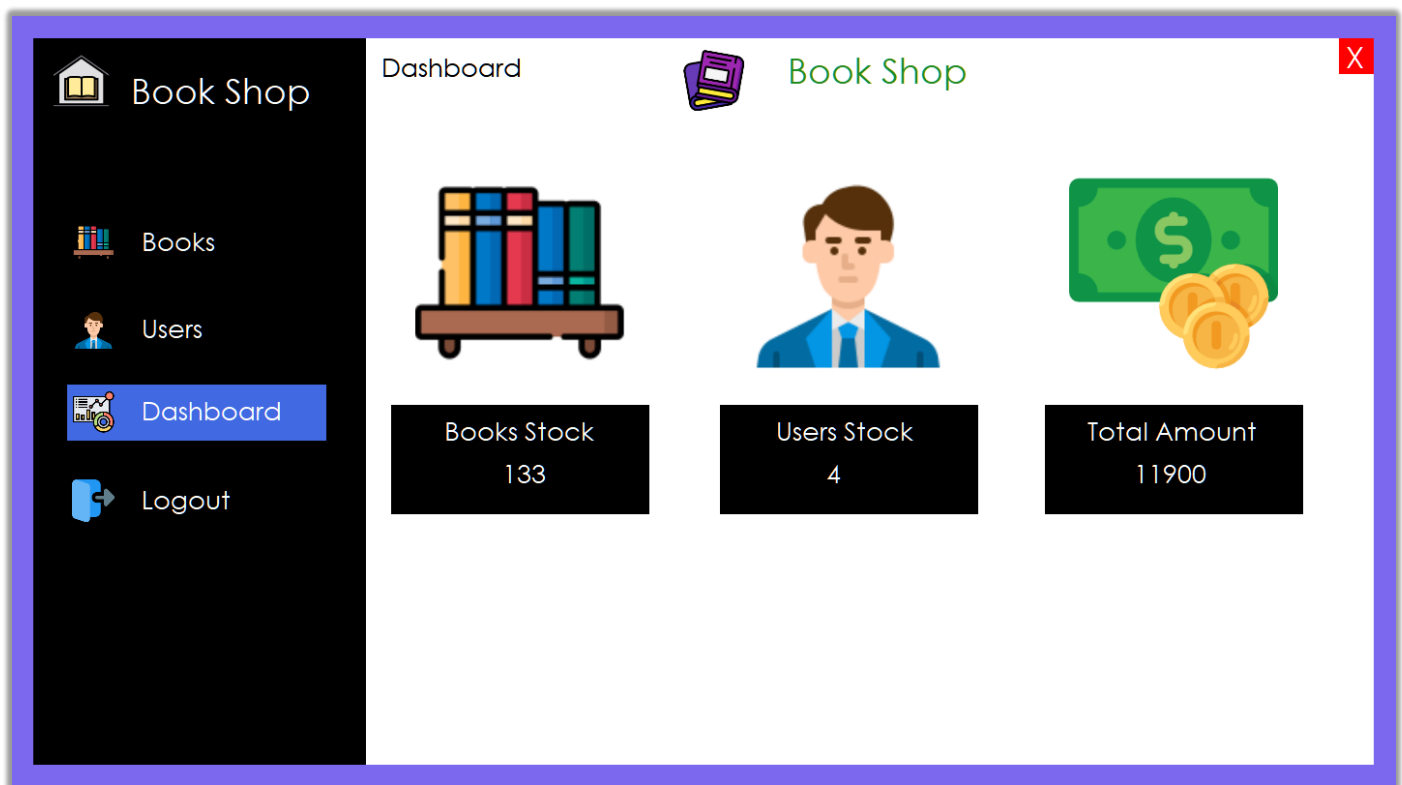
- Admin can see overall stats about the bookshop.

- It consists of Books Stock, Users Stock and Total Amount.

- Books Stock shows the total number of books present in the bookshop.

- Users Stock shows how many users are currently linked to our bookshop.

- Total amount shows the total earning through all the books that are sold.

- Logout button takes us back to the login screen.

<u>Conclusion</u>

The application was designed in such a way that future modifications can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the efficiency
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

<u>Future Scope</u>

This application avoids the manual work and the problems concern with it. It is an easy way to obtain the information regarding the different bookshops information that are currently issued.

Well, I have worked hard in order to present an improved application better than the existing one's regarding the information about the various activities. Still, I found out that the project can be done in a better way.

- Primarily, we can increase the efficiency of the application by using different approaches and algorithms.

- We can integrate chat option in the application for the communication between customers and admin for any doubt or complaint.

- We can use a password recovery option in case a user forgets the password.

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