KENDRIYA VIDYALAYA

केन्द्रीय विद्यालय संगठन

INFORMATIC PRACTICES

INVESTIGATORY PROJECT
ON

LIBRARY MANAGEMENT SYSTEM
2008-09

Guided by:
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Project by:
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CERTIFICATE

     This is to certify that **_NISHCHAY MALAKAR_**, a student of Class XII-A of K.V.No.1, AF Stn. Pathankot bearing **Roll No: 2676357** have successfully completed his project file under my supervision. I certify that this project is up to my expectations and as per the guidelines issued by CBSE.

PGT Comp. Science   Principal's
Signature
(Mr. Kapil saini)   **(Mr.P.C.Prashar)**

CERTIFICATE

It is certified that the project work entitled "**Library management system**" which is being submitted by me in fulfillment of the requirement for CBSE AISSCE's Board Practical Exam 2008-09 in an authentic work carried out by me at **K.V. # 1 AFS Pathankot** under the supervision and guidance of **Mr. Kapil Saini**

(   )
Mr. Kapil Saini
PGT Comp. science

(   )

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ACKNOWLEDGEMENT

This project "**LIBRARY MANAGEMENT SYSTEM"** has been designed & developed during AISSCE Practical Examination 2008-09 conducted by **CBSE** for the fulfillment of the practical in Informatics Practices.

I take this opportunity to express my profound sense of gratitude and respect to all those who helped me throughout this venture.

I owe my regards to **Mr.P.C.Prashar**, Principal **K.V.No.1 (AFS) Pathankot** for his cooperation and valuable support and for giving me the opportunity to undertake this project work and providing the necessary infrastructure.

In presenting this project it gives me great pleasure to express my heartiest gratitude, sense and ineptness to **Mr.KAPIL SAINI** (PGT Comp. Science) for his valuable assistance & support throughout my studentship under him at the institute in completing this investigatory project on developing software for keeping records of a SCHOOL LIBRARY. This project is his visualization and owes a lot of its functionality to him.

Last but not the least; I owe my overwhelming gratitude to my family and friends who gave me constant support and motivation to continue with this endeavor.

Date: Feb2009   (   )
 Name   : NISHCHAY MALAKAR
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Project on library Management System

LIBRARY OVERVIEW

Library is one of the important parts of our school. It plays an important role in the society. According to an ancient proverb "books are the best friends", and we can find these friends in the library. In library we find books on all the subjects and from various publishers are available for us. In some of the libraries books from all over the world are available. We can get them anytime and utilize them.

In libraries the no. of books will cross over thousands and maintaining such a big no of books is itself a big challenge. The records include purchasing, issuing, returning and many more such kind of activities. This may surely confuse an individual. Therefore we need to computerize the system with the help of database so as to make our requirements in a more easy way. It will reduce time and will be more efficient

Problems associated with manual management

Library is approached by people for the satisfaction of their thirst of knowledge. Current manual system of the library management is very complicated and lengthy. A large number of registers are maintained in order to maintain the list of students, books & their details & student's details.

As explained before library management system is a big complicated system, there fore the problems associated with manual management are listed below:

1. Time consuming:
2. Expensive:
3. Non availability of details:
4. Decreased efficiency and accuracy:
5. Difficult & confusing:
6. Duplication of work:
7. Errors in maintenance:

PROPOSED SYSTEM

Library World wishes to computerize its management system with the help of data base. It allows the librarian to update existing application for his own ease like books account management, developing ledgers, issuing and returning books etc. Also on the other face the reader/students wants to be computerized solution of the above. It entails looking into the duplication of effort, bottlenecks, and inefficient existing procedures.

An automated system is to be developed for library management system that performs the following tasks:

- ➢ Issuing of books
- ➢ Returning of books
- ➢ Purchasing and adding new books
- ➢ Maintains delay and fines
- ➢ Maintains students Information.
- ➢ Providing Stock Management.
- ➢ Fast updating of stock, their rates.
- ➢ Security

ADVANTAGES

1. Time saving.
2. Economical.
3. Faster and easier data retrieval.
4. Availability of data.

DATABASE DESCRIPTION

LIB TABLE   : This table contains all the necessary details about the books and to whom the book have been issued, what is the date of purchase and all that.

| FIELDS	DESCRIPTION
A. accno:	Account no is a unique no allotted to every book. It acts as primary key is the base to reach or identify the record. Its data type is number
book name:	It is the name of the book. Its data type is text.
authername:	Authername is the name of the individual(s) who have written the book. Its data type is text.
Dat_purchase:	It represents the date on which the book was purchased or enlisted in the stock. Its data type is date/time.
Date_issue:	This field represents the date of issuing of the particular book to the student. Its data type is date/time.
Dat_return:	The field represents the date on which last time it was submitted in the stock. Its data type is date/time.
price:	The price at which the book was purchased for library. Its data type is currency.
Iss_st_no:	This field represents the ID of student to whom the book has been issued. Its data type is text.

TABLE STRUCTRES

LIB TABLE:

Accno	Authername	Dat_purchas	Date_issue	Dat_return	Price	Iss_st_no

FORMS DESIGN & CODING

1) SPLASH FORM: -

This screen is the introductory screen of library Management System. In another words it is the welcome screen of the system. It specifies the Version Number of the product, licensee of the product, Title of the product & copyright issues.
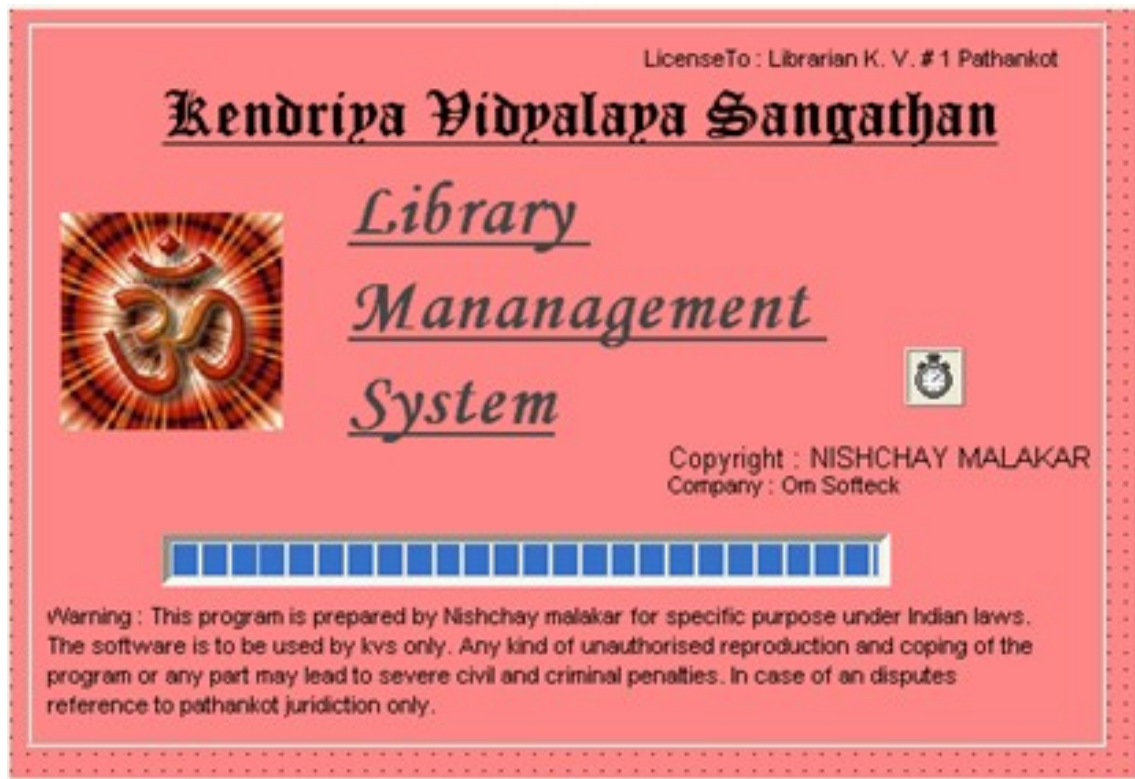
CODING: -

```
Dim i as Integer

Private Sub Timer1_Timer ()
For i = 1 to Val (ProgressBar1.Max)
   If ProgressBar1.Value >= 500000 Then
      Unload Me
      frmsec.Show
      Exit Sub
   End If
   ProgressBar1.Value = ProgressBar1.Value + 1
Next

End Sub
```

2) SECURITY FORM:-

It is the gateway to Library Management System. User must identify himself before entering the computerized system. User must enter the password in order to check whether he/she is an authorized person or not to use the system.
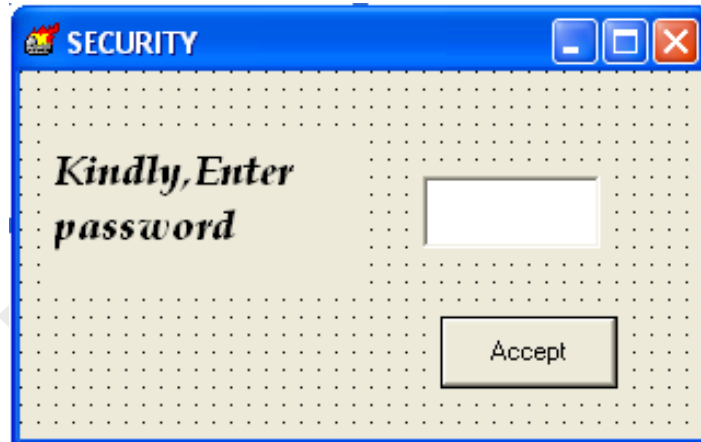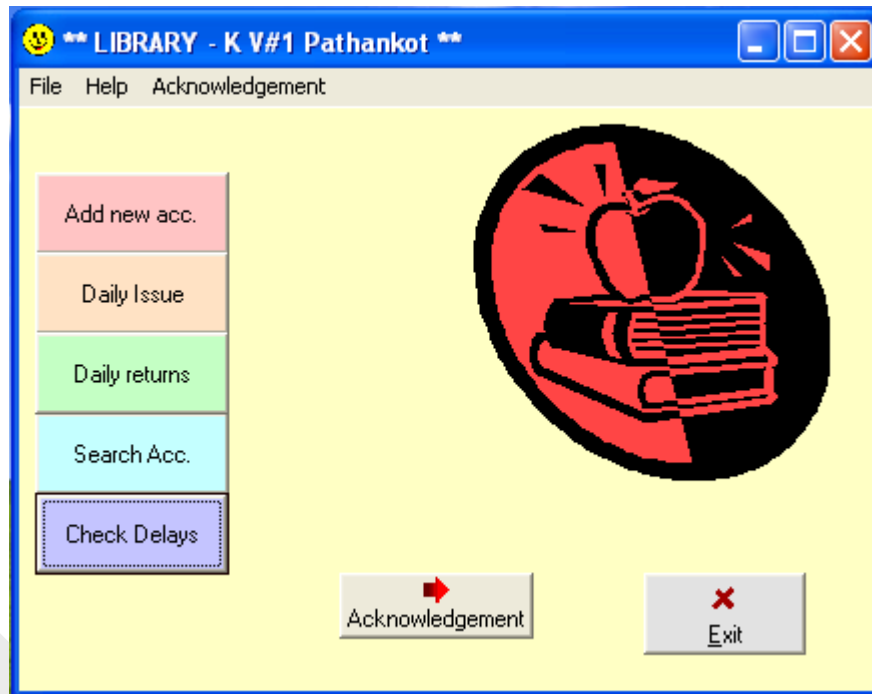

CODING:

Private Sub Cmdaccept_Click ()

If UCase (Txtpass.Text) = Txtpass.Tag Then

frmhome.Show

frmsec.Hide

Unload frmsec

End If

End Sub

3) MAIN FORM: -

After successful security check, the next form to appear is the Main form of Library Management System. This form shows the contents of the Library Management System, which are as follows: -

CODING: -

```
Private Sub cmdadd_Click()
Call mnuaddnew_Click
frmnew.Adonew.Recordset.AddNew
End Sub

Private Sub cmddaily_Click()

End Sub

Private Sub cmdfind_Click()
Call mnusearch_Click
End Sub

Private Sub cmdchk_Click()
Call mnuchk_Click
End Sub

Private Sub cmdissue_Click()
Call mnuissue_Click
End Sub

Private Sub cmdreturn_Click()
Call mnureturn_Click
```

Project on library Management System

```
End Sub

Private Sub Cmdend_Click()
End
End Sub

Private Sub Cmdack_Click()
frmack.Show
End Sub

Private Sub Form_MouseUp(Button As Integer, Shift As Integer, X As Single, Y As Single)
If Button = 2 Then
PopupMenu mnufile
End If
End Sub

Private Sub mnuack_Click()
frmack.Show
End Sub

Private Sub mnuaddnew_Click()
frmnew.Show

End Sub

Private Sub mnuchk_Click()
frmchk.Show

End Sub

Private Sub mnudaily_Click()


End Sub

Private Sub mnuexit_Click()
End
End Sub

Private Sub mnuhelp_Click()
frmhelp.Show
End Sub

Private Sub mnuissue_Click()
frmissue.Show
End Sub

Private Sub mnureturn_Click()
frmreturn.Show
End Sub

Private Sub mnusearch_Click()
frmfind.Show
End Sub
```

4) <u>NEW ACCOUNT FORM: -</u>

This form allows the user to create and feed new book account. This function can be used to add new accounts in yur library stock i.e. if you have any new book that you want to add in the stock the only thing you have to do is to just fill up all the necessary details in the boxes and click update.If you had purchased the book on the same day just clik today and fill all the details.

CODING: -

```
Private Sub Cmdupdate_Click()
Adonew.Recordset.Update
Adonew.Refresh

End Sub

Private Sub Cmdadtoday_Click()
Txtdatpur.Text = Now
End Sub
```

5) DAILY ISSUE FORM: -

This functin has been introduced for daily purpose of a library i.e. if the librarian wants to issue a book to a student then just add the account no of the book in the box and the students id in the next box and then click issue button, a message will be showed if the book is issued and if the book is issued to any another student it will inform you about it, and the necessary details will be showed on right side. Remember it will ask for password each time issuing the book.

CODING: -

```
Private Sub Cmdissue_Click()
Dim a as integer, acc as integer
Adoissue.Refresh
a = InputBox("Please kindly enter password", "security")
If Not LCase(a) = "om" Then
MsgBox "sorry, wrong password", vbExclamation, "Library kv#1"
GoTo ram
End If
Dim flag As Boolean
    flag = False
    acc = Val(Txtaccno.Text)
```

```
      Adoissue.Recordset.MoveFirst
   While Adoissue.Recordset.EOF = False
   If Adoissue.Recordset.Fields(0).Value = Val(acc) Then
      frmissue.Txtissdat.Text = Now
      frmissue.Txtiss_st.Text = Txtstid.Text

      MsgBox "The book bearing account no. " & acc & " has been issued to student no " & Txtstid.Text,
vbOKOnly, "Library KV#1"

      flag = True
   GoTo Nish
   End If
      Adoissue.Recordset.MoveNext

   Wend
   If flag = False Then
      MsgBox "Account does not exists ", vbOKOnly, "Library KV#1"
      Adoissue.Recordset.MoveFirst
   End If
Nish:
Adoissue.Recordset.Update

      Txtaccno.Text = ""
      Txtstid.Text = ""
ram:
End Sub
```

6) **DAILY RETURN FORM: -**

This functin has been introduced for daily purpose of a library i.e. if the librarian wants to return a book to the stock then he will have to just add the account no of the book in the box and then click return button, a message will be showed if the book is returned sucessfully and if the book is already present in the stock it will inform you about it,and the necessary details will be showed on right side. Remember it will ask for password each time returning the book.

Contain two hidden text boxed Text1 and text2

CODING: -

```
Private Sub Cmdreturn_Click()
Dim b, acc as integer
Adoreturn.Refresh
b = InputBox("please kindly enter password", "security")
If Not LCase(b) = "om" Then
MsgBox "sorry, wrong password", vbExclamation, "Library kv#1"
GoTo karan
End If
If Not Txtaccno.Text = "" Then

Dim flag As Boolean
     flag = False
     acc = Val(Txtaccno.Text)

    Adoreturn.Recordset.MoveFirst
   While Adoreturn.Recordset.EOF = False
   If Adoreturn.Recordset.Fields(0).Value = Val(acc) Then
     flag = True
     If Text1.Text = "" Then
       MsgBox "The book bearing account no. " & acc & " is already present in the school stock ",
vbOKOnly, "Library KV#1"
     Else
       frmreturn.Text1.Text = ""
```

```
        frmreturn.Text2.Text = ""
        MsgBox "The book bearing account no. " & acc & " has been sucessfully returned", vbOKOnly,
"Library KV#1"

    End If
    GoTo Nish
  End If
    Adoreturn.Recordset.MoveNext

  Wend
  If flag = False Then
    MsgBox "Account does not exists ", vbOKOnly, "Library KV#1"
    Adoreturn.Recordset.MoveFirst
  End If
Nish:
Adoreturn.Recordset.Update
Else
  MsgBox "please enter acc. no. of the book to be returned ", vbOKOnly, "Library KV#1"
End If
karan:
End Sub
```

7) <u>SEARCH FORM: -</u>

This functin has been introduced for making easy access to all the records just by entering the account no.

CODING: -

```
Private Sub Cmdsearch_Click()
Adorec.Refresh
serno = InputBox("enter account no.", "library search")
Dim flag As Boolean
    flag = False

    Adorec.Recordset.MoveFirst
  While Adorec.Recordset.EOF = False
  If Adorec.Recordset.Fields("accno").Value = Val(serno) Then
    MsgBox "Record found"
    flag = True
  GoTo Nish
  End If
    Adorec.Recordset.MoveNext
  Wend
  If flag = False Then
    MsgBox "record not found"
    Adorec.Recordset.MoveFirst
  End If
Nish:

End Sub
```
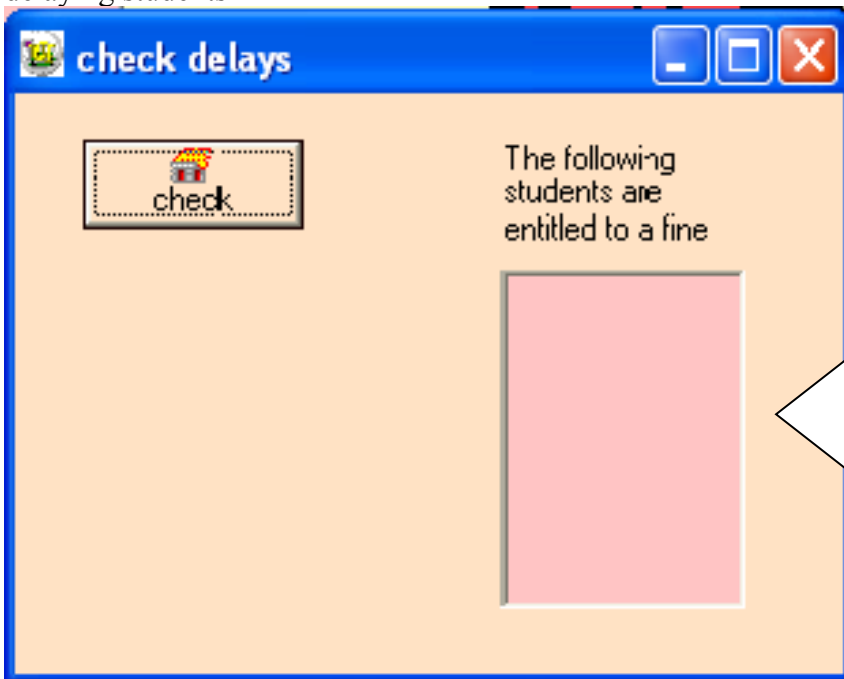
8) CHECKING DELAY FORM: -

This functin has been introduced for checking regularities, if any student keep the book with him for more than 14 days than by clicking upon the check button we get id of all the delaying students

The form contain two hidden text boxes
Text1 and text2
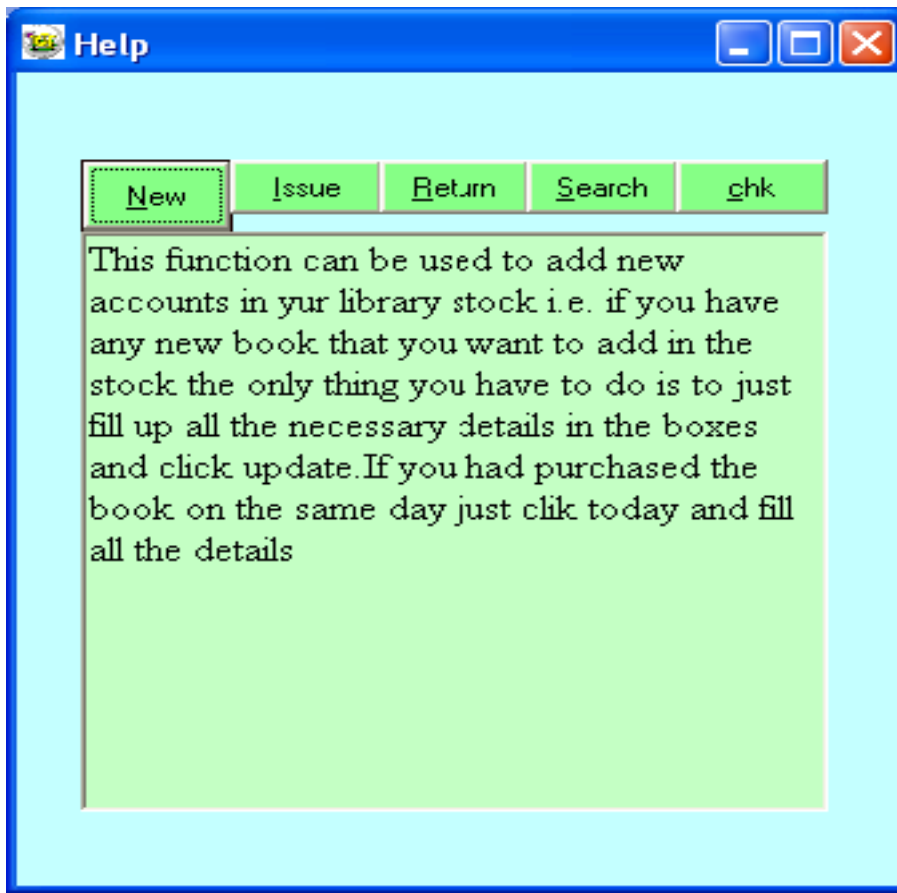
CODING: -

```
Private Sub Cmdchk_Click()
    Adochk.Refresh
    Dim flag As Boolean, dif As Integer
    Dim issdat
    flag = False
        Adochk.Recordset.MoveFirst
    Do Until (Adochk.Recordset.EOF = True)
     If Text1.Text = "" Then
     GoTo Nish:
     Else
      issdat = Text1.Text
      dif = Abs(DateDiff("d", issdat, Now))
      If dif > 14 Then
        List1.AddItem Text2.Text
      End If
     End If
Nish:
        Adochk.Recordset.MoveNext

   Loop
End Sub
```

9) HELP FORM: -

This form helps the user how to use the software. On clicking the various command buttons it gives us details about each function. It can be accessed through its menu option.

CODING: -

Private Sub Cmdnew_Click()
Command1.Height = 495
Command2.Height = 375
Command3.Height = 375
Command4.Height = 375
Command5.Height = 375
Txthelp.Text = "This function can be used to add new accounts in yur library stock i.e. if you have any new book that you want to add in the stock the only thing you have to do is to just fill up all the necessary details in the boxes and click update.If you had purchased the book on the same day just clik today and fill all the details "
End Sub

Private Sub Cmdissue_Click()
Command2.Height = 495
Command1.Height = 375
Command3.Height = 375
Command4.Height = 375
Command5.Height = 375
Txthelp.Text = "This functin has been introduced for daily purpose of a library i.e. if the librarian wants to issue a book to a student then just add the account no of the book in the box and the students id in the next

box and then click issue button, a message will be showed if the book is issued and if the book is issued to any another student it will inform you about it,and the necessary details will be showed on right side. Remember it will ask for password each time issuing the book."
End Sub

```
Private Sub Cmdreturn_Click()
Command3.Height = 495
Command2.Height = 375
Command1.Height = 375
Command4.Height = 375
Command5.Height = 375
Txthelp.Text = "This functin has been introduced for daily purpose of a library i.e. if the librarian wants to return a book to the stock then he will have to  just add the account no of the book in the box and then click return button, a message will be showed if the book is returned sucessfully and if the book is already present in the stock it will inform you about it,and the necessary details will be showed on right side. Remember it will ask for password each time returning the book."

End Sub

Private Sub Cmdsearch_Click()
Command4.Height = 495
Command2.Height = 375
Command3.Height = 375
Command1.Height = 375
Command5.Height = 375
Txthelp.Text = "This functin has been introduced for making easy access to all the records just by entering the account no."
End Sub

Private Sub Cmdchk_Click()
Command5.Height = 495
Command2.Height = 375
Command3.Height = 375
Command4.Height = 375
Command1.Height = 375
Txthelp.Text = "This functin has been introduced for checking regularities, if any student keep the book with him for more than 14 days than by clicking upon the check button we get id of all the delaying students."
End Sub

Private Sub Form_Load()
Call Cmdnew_Click
End Sub
```

10) ACKNOWLEDGEMENT FORM: -

This form gives the acknowledgement of the programmer to the user.

CODING:

```
Private Sub Cmdok_Click()
Unload Me
End Sub
```

USER MANUAL

OPERATING INSTRUCTIONS: -

For using Library management system, a user must have its
Login account. For login user has been assigned a unique password .
➢   In the Main Form, all the options are not available. users can access those through menu options.
➢   User can add modify any account.
➢   User can issue and return books, thereby providing a password to the system on being asked.
➢   If you encounter any problem while handling the software please go through the help menu.

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