#### **Library Management System**

## 21CSS101J – PROGRAMMING FOR PROBLEM SOLVING

**Mini Project Report** 

Submitted by

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<b>Prob</b> l	lem	Stat	tem	ent

The library of a university is facing difficulty in managing its resources and tracking the usage of its resources by students. The library staff is unable to keep track of the books and other resources that are being borrowed by the students, and they are unable to monitor the usage of the library resources. This has resulted in a lack of efficiency in the library management system, which is causing a lot of inconvenience to both the library staff and the students.

### Methodology / Procedure

- 1. <u>Identify the Requirements:</u> The first step in developing a library management system is to identify the requirements of the system. This includes understanding the purpose of the system, the types of users who will be using it, and the features and functionality that are needed.
- 2. <u>Design the System:</u> Once the requirements have been identified, the next step is to design the system. This includes creating a database structure, designing user interfaces, and developing algorithms for data manipulation.
- **3.** <u>Develop the System:</u> After the design is complete, the system can be developed. This includes writing code, testing the system, and debugging any errors that are found.
- 4. <u>Test the System:</u> Once the system is developed, it must be tested to ensure that it meets the requirements and functions as expected. This includes unit testing, integration testing, and user acceptance testing.
- 5. <u>Deploy the System:</u> After the system has been tested and approved, it can be deployed to production. This includes setting up the system on the server, configuring the system, and ensuring that it is secure.
- **6.** Monitor and Maintain the System: After the system is deployed, it must be monitored and maintained to ensure that it continues to meet the requirements and functions as expected. This includes monitoring performance, responding to user feedback, and making any necessary changes or updates.

#### **Coding (C or Python)**

```
import mysql.connector
import datetime
mydb=mysql.connector.connect(user='root',password='3101',host='localhost',
database='pps mini project')
mycursor=mydb.cursor()
def registermem():
    L=[]
    print("="*140)
    print("Registration for New Members".center(140))
    name=input("Enter Name:\t")
    L.append(name)
    phone=input("Enter Phone No:\t")
    L.append(phone)
    email_id=input("Enter Email-Id:\t")
    L.append(email_id)
    memeber_since= datetime.date.today()
    L.append(memeber_since)
    cust=(L)
    sql="insert into
customer_info(name,phone,email_id,member_since)values(%s,%s,%s,%s)"
    mycursor.execute(sql,cust)
    mydb.commit()
    print("Registered successfully !!".center(140))
    print("="*140)
def memview():
    print("="*140)
    print("Member's registred Info".center(140))
    print("\nDo you want to see all members?? - press 1")
    print("\nDo you want to see specific members?? - press 2")
    ch=int(input("\nEnter 1 or 2 :\t"))
    if ch==1:
        sql="select * from customer_info"
        mycursor.execute(sql)
        rows=mycursor.fetchall()
        print("="*140)
        print("All Member Information".center(140))
        for x in rows:
            print("Members No:",x[0])
            print("Name:",x[1])
            print("Phone Number:",x[2])
            print("Email-Id:",x[3])
            print("Member Since:",x[4])
            print("\n")
```

```
print("="*140)
    elif ch==2:
        1=[]
        mem_id=int(input("Enter Member's No to fetch the details about it
:\t"))
        1.append(mem_id)
        view=(1)
        sql="select * from customer info where member no=%s"
        mycursor.execute(sql,view)
        rows=mycursor.fetchone()
        print("="*140)
        print("Member No:",rows[0])
        print("Name:",rows[1])
        print("Phone Number:",rows[2])
        print("Email-Id:",rows[3])
        print("Member Since:",rows[4])
        print("="*140)
    else:
        print("Table viewation was cancelled")
def updatememberinfo():
     print("="*140)
     print("Updation Section".center(140))
     print("\nDo you want to see Member's Data available??")
     ch=int(input("\nEnter 1 for yes :\t"))
     if ch==1:
         sql="select * from customer_info"
         mycursor.execute(sql)
         rows=mycursor.fetchall()
         print("\nShowing Members info.....")
         print("\n")
         for x in rows:
            print("Members No:",x[0])
            print("Name:",x[1])
            print("Phone Number:",x[2])
            print("Email-Id:",x[3])
            print("Member Since:",x[4])
            print("\n")
         print("="*140)
         print("\nDo you want to Update Member's info??")
         ch1=int(input("\nEnter 1 for yes :\t"))
         if ch1==1:
                  print("="*140)
                  print("Updation Menu".center(140))
                  print("\nenter 1 : To Update Member's Name")
                  print("\nenter 2 : To Update Member's Phone No")
                  print("\nenter 3 : To Update Member's Email-Id")
                  ch2=int(input("\nenter your choice:\t"))
```

```
if ch2==1:
                    L=[]
                    print("*"*140)
                    print("Name Updation".center(140))
                    name=input("\nEnter New Name to be updated:\t")
                    L.append(name)
                    memid=int(input("\nEnter the Member No from the above
table display:\t"))
                    L.append(memid)
                    sql="update customer_info set Name=%s where
Member_no=%s"
                    updation=(L)
                    mycursor.execute(sql,updation)
                    mydb.commit()
                    print("Updation Done!!".center(140))
                  elif ch2==2:
                    L=[]
                    print("*"*140)
                    print("Phone Number Updation".center(140))
                    phone_new=input("\nEnter New phone no to be
updated\t")
                    L.append(phone new)
                    memid=int(input("\nEnter the Member No from the above
table display:\t"))
                    L.append(memid)
                    sql="update customer_info set phone=%s where
Member_no=%s"
                    updation=(L)
                    mycursor.execute(sql,updation)
                    mydb.commit()
                    print("Updation Done!!".center(140))
                  elif ch2==3:
                      L=[]
                      print("*"*140)
                      print("Email-Id Updation".center(140))
                      email_id_new=input("\nEnter New Email Id for
Updation:\t")
                      L.append(email id new)
                      memid=int(input("\nEnter the Member No from the
above table display:\t"))
                      L.append(memid)
                      sql="update customer_info set email_id=%s where
Member_no=%s"
                      updation=(L)
                      mycursor.execute(sql,updation)
                      mydb.commit()
                      print("Updation Done!!".center(140))
                  else:
```

```
print("\nSorry for the Conivence we have only four
choices :) ")
                      print("\nplease enter your the correct choice from
the updation!!\t")
def deletememinfo():
    print("="*140)
    print("Deletion of Member info".center(140))
    print("\nDo you want to see available??- press 1")
    print("\nDo you want to Exit this menu - press 0")
    ch=int(input("\nEnter 1 or 0 :\t"))
    if ch==1:
         sql="select * from customer_info"
         mycursor.execute(sql)
         rows=mycursor.fetchall()
         for x in rows:
            print("Members No:",x[0])
            print("Name:",x[1])
            print("Phone Number:",x[2])
            print("Email-Id:",x[3])
            print("Member Since:",x[4])
            print("\n")
         print("="*140)
         print("\nDo you want to Delete specific Member data??")
         ch1=int(input("\nEnter 1 for yes :\t"))
         if ch1==1:
              L=[]
              custid=int(input("\nenter your ID from the above table
display:\t"))
              L.append(custid)
              sql="delete from customer info where Member No=%s"
              updation=(L)
              mycursor.execute(sql,updation)
              mydb.commit()
              print("Deletion Done!!".center(140))
              print("="*140)
    else:
        print("Exit is done".center(140))
def registernewbook():
    L=[]
    print("="*140)
    print("Registration of new book".center(140))
    name=input("Enter the Name of the book:\t")
    L.append(name)
    bookname=input("Enter Author name:\t")
    L.append(bookname)
    status="Available"
    L.append(status)
```

```
number=int(input("Enter No of books came in:\t"))
    L.append(number)
    register=(L)
    sql="insert into
books(title,author,status,no_of_books)values(%s,%s,%s,%s)"
    mycursor.execute(sql,register)
    mydb.commit()
    print("Registered successfully !!".center(140))
    print("="*140)
def bookview():
    print("="*140)
    print("Book Info".center(140))
    print("\nDo you want to see all available books information?? - press
1")
    print("\nDo you want to see specific books?? - press 2")
    print("\nDo you want to Exit this menu - press 0")
    ch=int(input("\nEnter 1 or 2 or :\t"))
    if ch==1:
        sql="select * from books"
        mycursor.execute(sql)
        rows=mycursor.fetchall()
        print("="*140)
        print("All Available Books".center(140))
        for x in rows:
            print("Book Id:",x[0])
            print("Book Name:",x[1])
            print("Book Author:",x[2])
            print("No.of Books:",x[4])
            print("\n")
        print("="*140)
    elif ch==2:
        1=[]
        mem_id=input("Enter Bookname to fetch the details about it :\t")
        1.append(mem id)
        view=(1)
        sql="select * from books where title=%s"
        mycursor.execute(sql,view)
        rows=mycursor.fetchone()
        print("="*140)
        print("Book Id:",rows[0])
        print("Book Name:",rows[1])
        print("Book Author:",rows[2])
        print("No.of Books:",rows[4])
        print("="*140)
    else:
        print("Table viewation was cancelled")
def issuebook():
```

```
1=[]
   print("="*140)
   print("Issuing book".center(140))
   bid=int(input("Enter the Book ID:\t"))
   1.append(bid)
    sql="select title,status,no_of_books from books where bid=%s"
   mycursor.execute(sql,1)
   number=mycursor.fetchone()
   title=str(number[0])
   print("Book title:",title)
    status=str(number[1])
   print("Book Availability:",status)
   number1=int(number[2])
   if(number1>1):
        L=[]
        L.append(bid)
        issue=L
        L1=[]
        L2=[]
        L1.append(bid)
        L1.append(title)
        memid=int(input("Enter member id:\t"))
        L1.append(memid)
        L2.append(memid)
        sql="select Member_no from issued_books where Member_no=%s"
        mycursor.execute(sq1,L2)
        rows=mycursor.fetchone()
        if(rows==None):
            issue date=datetime.date.today()
            L1.append(issue date)
            return date= issue date + datetime.timedelta(days=14)
            L1.append(return date)
            issued1=L1
            sql="insert into
issued books(bid, title, member no, issue date, return date) values(%s, %s, %s, %s
,%s)"
            mycursor.execute(sql,issued1)
            mydb.commit()
            sql="update books set no of books=no of books-1 where bid=%s"
            mycursor.execute(sql,issue)
            mydb.commit()
            print("Issued the book Sucessfully".center(140))
            print("="*140)
        elif(int(rows[0])!=memid):
            issue date=datetime.date.today()
            L1.append(issue date)
            return_date= issue_date + datetime.timedelta(days=14)
            L1.append(return date)
            issued1=L1
```

```
sql="insert into
issued_books(bid,title,member_no,issue_date,return_date)values(%s,%s,%s,%s
,%s)"
            mycursor.execute(sql,issued1)
            mydb.commit()
            sql="update books set no_of_books=no_of_books-1 where bid=%s"
            mycursor.execute(sql,issue)
            mydb.commit()
            print("Issued the book Sucessfully".center(140))
            print("="*140)
        else:
            print("Only One Book is allowed per Member".center(140))
    elif(number1==1):
         L=[]
         status="Empty"
         L.append(status)
         L.append(bid)
         issue=L
         L1=[]
         L2=[]
         L1.append(bid)
         L1.append(title)
         memid=int(input("Enter member id:\t"))
         L1.append(memid)
         L2.append(memid)
         sql="select Member no from issued books where Member no=%s"
         mycursor.execute(sql,L2)
         rows=mycursor.fetchone()
         if(rows==None):
            issue date=datetime.date.today()
            L1.append(issue date)
            return date= issue date + datetime.timedelta(days=14)
            L1.append(return date)
            issued1=L1
            sal="insert into
issued_books(bid,title,member_no,issue_date,return_date)values(%s,%s,%s,%s
,%s)"
            mycursor.execute(sql,issued1)
            mydb.commit()
            sql="update books set no_of_books=0,status=%s where bid=%s"
            mycursor.execute(sql,issue)
            mydb.commit()
            print("Issued the book Sucessfully".center(140))
            print("="*140)
         elif(int(rows[0])!=memid):
             issue date=datetime.date.today()
             L1.append(issue date)
             return_date= issue_date + datetime.timedelta(days=14)
             L1.append(return date)
```

```
issued1=L1
             sql="insert into
issued_books(bid,title,member_no,issue_date,return_date)values(%s,%s,%s,%s
,%s)"
             mycursor.execute(sql,issued1)
             mydb.commit()
             sql="update books set no_of_books=0,status=%s where bid=%s"
             mycursor.execute(sql,issue)
             mydb.commit()
             print("Issued the book Sucessfully".center(140))
             print("="*140)
         else:
             L=[]
             status="Avialable"
             L.append(status)
             L.append(bid)
             sql="update books set no_of_books=no_of_books+1,status=%s
where bid=%s"
             mycursor.execute(sql,L)
             mydb.commit()
             sql="update books set no_of_books=0,status=%s where bid=%s"
             mycursor.execute(sql,issue)
             mydb.commit()
             print("Only One Book is allowed per Member".center(140))
    else:
        print("No books in hand right now....See later".center(140))
def return issued():
    print("="*140)
    print("Return of issued Book".center(140))
    1=[]
    mem id=int(input("Enter Member's No:\t"))
    1.append(mem id)
    view=(1)
    sql="select * from issued books where member no=%s"
    mycursor.execute(sql,view)
    rows=mycursor.fetchone()
    if(rows!=None):
        print("Issued Book Details".center(140))
        print("Book Id:",rows[0])
        print("Book Name:",rows[1])
        print("Member No:",rows[2])
        print("Issued Date:",rows[3])
        print("Return Date:",rows[4])
        print("="*140)
        ch=input("Enter 1 to confrim Return:\t")
        if(ch=='1'):
            return date=str(rows[4])
            today date=str(datetime.date.today())
```

```
if(return_date==today_date or return_date>today_date):
                L=[]
                bid=int(rows[0])
                L.append(bid)
                sql="select no_of_books from books where bid=%s"
                mycursor.execute(sql,L)
                number=mycursor.fetchone()
                int number=int(number[0])
                if(int_number==0):
                    L=[]
                    bid=int(rows[0])
                    L.append(bid)
                    sql="update books set no_of_books=1 where bid=%s"
                    mycursor.execute(sql,L)
                    mydb.commit()
                    11=[]
                    11.append(mem_id)
                    11.append(bid)
                    sql1="delete from issued books where Member no=%s and
bid=%s"
                    mycursor.execute(sql1,l1)
                    mydb.commit()
                    print("Return within Time No Additional
fee".center(140))
                elif(int_number>=1):
                    L=[]
                    bid=int(rows[0])
                    L.append(bid)
                    sql="update books set no_of_books=no_of_books+1 where
bid=%s"
                    mycursor.execute(sql,L)
                    mydb.commit()
                    11=[]
                    11.append(mem id)
                    11.append(bid)
                    sql1="delete from issued books where Member no=%s and
bid=%s"
                    mycursor.execute(sql1,l1)
                    mydb.commit()
                    print("Return within Time No Additional
fee".center(140))
            else:
                L=[]
                bid=int(rows[0])
                L.append(bid)
                sql="select no of books from books where bid=%s"
                mycursor.execute(sql,L)
                number=mycursor.fetchone()
                int number=int(number[0])
```

```
if(int_number==0):
                    L=[]
                    bid=int(rows[0])
                    L.append(bid)
                    sql="update books set no_of_books=1 where bid=%s"
                    mycursor.execute(sql,L)
                    mydb.commit()
                    11=[]
                    11.append(mem id)
                    11.append(bid)
                    sql1="delete from issued_books where Member_no=%s and
bid=%s"
                    mycursor.execute(sql1,l1)
                    mydb.commit()
                    print("Return of the book is late!!".center(140))
                elif(int number>=1):
                    L=[]
                    bid=int(rows[0])
                    L.append(bid)
                    sql="update books set no_of_books=1 where bid=%s"
                    mycursor.execute(sql,L)
                    mydb.commit()
                    11=[]
                    11.append(mem id)
                    11.append(bid)
                    sql1="delete from issued_books where Member_no=%s and
bid=%s"
                    mycursor.execute(sql1,l1)
                    mydb.commit()
                    print("Return of the book is late!!".center(140))
        else:
            print("Return process is cancelled")
    else:
        print("="*140)
        print("No Return for the given Member No".center(140))
        print("="*140)
def Menuset():
    while True:
        print("*"*140)
        print("Welcome to Library Management!!\n".center(140))
        print("enter 1 : To Register New Members".center(140))
        print("enter 2 : To View Existing Members".center(140))
        print("enter 3 : To Update Members Infomation".center(140))
        print("enter 4 : To Delete Customer's Data".center(140))
        print("enter 5 : To Add New Book Details".center(140))
        print("enter 6 : To View Available Books in The
Library".center(140))
       print("enter 7 : Issuing the book ".center(140))
```

```
print("enter 8 : Return of The Issued Book".center(140))
        print("enter 9 : Exit".center(140))
        print("*"*140)
        userinput= input("enter your choice:\t")
        if(userinput=='1'):
            registermem()
        elif(userinput=='2'):
            memview()
        elif(userinput=='3'):
            updatememberinfo()
        elif(userinput=='4'):
            deletememinfo()
        elif(userinput=='5'):
            registernewbook()
        elif(userinput=='6'):
            bookview()
        elif(userinput=='7'):
            issuebook()
        elif(userinput=='8'):
            return_issued()
        elif(userinput=='9'):
            print("="*140)
            print("Session over")
            print("="*140)
            break
        elif(userinput==''):
            print("Left a blank....Enter the correct Choice!! :D")
            Menuset()
        else:
            print("\nLeft a space/Maybe Wrong Option Enter Correct Choice
!! :D")
Menuset()
```

#### **Mysql table Structure Details**

```
mysql> desc customer_info;
 Field
                                      | Null |
                                               Key | Default | Extra
                 Type
 Member_No
                 bigint(20) unsigned
                                        NO
                                               PRI
                                                      NULL
                                                                auto_increment
                 varchar(100)
                                                      NULL
  Name
                                        NO
                 varchar(100)
                                        NO
  Phone
                                                      NULL
  email_id
                                                      NULL
                 varchar(100)
                                        NO
  Member_since
                 date
                                        NO
                                                      NULL
 rows in set (0.01 sec)
```

Field	Type	Null	Key	Default	Extra
 Bid	bigint(20) unsigned	NO	PRI	NULL	auto_increment
Title	varchar(100)	NO		NULL	
Author	varchar(100)	NO		NULL	
Status	varchar(100)	NO		NULL	
No_of_Books	varchar(100)	NO		NULL	

mysql> desc is:	sued_books;	<b>.</b>			
Field	Туре	Null	Key	Default	Extra
Title	date	NO		NULL NULL NULL NULL NULL	

#### **Results**

```
= RESTART: C:\Users\vivek\OneDrive\Desktop\CS\Python\Project\PPS_Mini_Project.py
                                                                                     Welcome to Library Management!!
enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
                                                                                         Registration for New Members
Enter Name: Vivek M G
Enter Phone No: 9444927932
Enter Email-Id: vivekmg31@gmail.com
                                                                                      Welcome to Library Management!!
                                                                                 enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
 enter 4: To Delete Customer's Data
enter 5: To Add New Book Details
enter 6: To View Available Books in The Library
enter 7: Issuing the book
enter 8: Return of The Issued Book
enter 9: Exit
                                                                                            Member's registred Info
Do you want to see all members?? - press 1
Do you want to see specific members?? - press 2
Enter 1 or 2 : 1
                                                                                            All Member Information
Members No: 1
Name: Rageshwaran.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
Members No: 2
Name: Vivek M G
Phone Number: 9444927932
Email-Id: vivekmg31@gmail.com
Member Since: 2022-12-08
                                                                                     Welcome to Library Management!!
enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
 enter your choice:
                                                                                            Member's registred Info
Do you want to see all members?? - press 1
Do you want to see specific members?? - press 2
Enter 1 or 2 : 2
Enter Member's No to fetch the details about it :
Name: Rageshwaran.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
```

Welcome to Library Management!! enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit enter your choice: Updation Section Do you want to see Member's Data available?? Enter 1 for yes : 1 Showing Members info..... Members No: 1 Name: Rageshwaran.G Phone Number: 6383976292 Email-Id: rg5513@srmist.edu.in Member Since: 2022-12-01 Members No: 2 Name: Vivek M G Phone Number: 9444927932 Email-1d: vivekmg31@gmail.com Member Since: 2022-12-08 Do you want to Update Member's info?? Enter 1 for yes : Name Updation Enter New Name to be updated: Ragesh.G Enter the Member No from the above table display: 1 Updation Done!! Welcome to Library Management!! enter 1 : To Register New Members enter 1: To Register New Members
enter 2: To View Existing Members
enter 3: To Update Members Infomation
enter 4: To Delete Customer's Data
enter 5: To Add New Book Details
enter 6: To View Available Books in The Library
enter 7: Issuing the book
enter 8: Return of The Issued Book
enter 9: Exit enter your choice: Showing Members info..... Members No: 1 Name: Rageshwaran.G Phone Number: 6383976292 Email-Id: rg5513@srmist.edu.in Member Since: 2022-12-01 Members No: 2 Name: Vivek M G Phone Number: 9444927932 Email-Id: vivekmg31@gmail.com Member Since: 2022-12-08 Do you want to Update Member's info?? Enter 1 for yes : 1 Updation Menu enter 1 : To Update Member's Name enter 2 : To Update Member's Phone No enter 3 : To Update Member's Email-Id

enter your choice: 1

```
Member's registred Info
Do you want to see all members?? - press 1
Do you want to see specific members?? - press 2
Enter 1 or 2 : 2
Enter Member's No to fetch the details about it :
Member No: 1
Name: Ragesh.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
Welcome to Library Management!!
enter 1: To Register New Members
enter 2: To View Existing Members
enter 3: To Update Members Infomation
enter 4: To Delete Customer's Data
enter 5: To Add we Book Details
enter 6: To View Available Books in The Library
enter 7: Issuing the book
enter 8: Return of The Issued Book
enter 9: Exit
enter your choice:
                          3
                                                                    Updation Section
Do you want to see Member's Data available??
Enter 1 for ves :
                         1
Showing Members info.....
Name: Ragesh.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
Members No: 2
Name: Vivek M G
Phone Number: 9444927932
Email-1d: vivekmg31@gmail.com
Member Since: 2022-12-08
Do you want to Update Member's info??
Enter 1 for yes :
                                                                      Updation Menu
enter 1 : To Update Member's Name
enter 2 : To Update Member's Phone No
enter 3 : To Update Member's Email-Id
enter your choice: 2
                                                                 Phone Number Updation
Enter New phone no to be updated
                                           7904388983
Enter the Member No from the above table display:
                                                           2
                                                                   Updation Done!!
Welcome to Library Management!!
                                                        enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
 enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                                Member's registred Info
Do you want to see all members?? - press \boldsymbol{1}
Do you want to see specific members?? - press 2
Enter 1 or 2 : 2
Enter Member's No to fetch the details about it :
Member No: 2
Name: Vivek M G
Phone Number: 7904388983
Email-Id: vivekmg31@gmail.com
Member Since: 2022-12-08
```

```
Welcome to Library Management!!
                                                 enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 8 : Return of The Issued Book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                                   Updation Section
Do you want to see Member's Data available??
Enter 1 for yes :
                        1
Showing Members info.....
Members No: 1
Name: Ragesh.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
Members No: 2
Name: Vivek M G
Phone Number: 7904388983
Email-Id: vivekmg31@gmail.com
Member Since: 2022-12-08
Do you want to Update Member's info??
Enter 1 for yes : 1
                                                                   Updation Menu
enter 1 : To Update Member's Name
enter 2 : To Update Member's Phone No
enter 3 : To Update Member's Email-Id
enter your choice: 3
                                                                Email-Id Updation
Enter New Email Id for Updation:
                                         vm4512@srmist.edu.in
Enter the Member No from the above table display:
                                                                 Updation Done!!
Welcome to Library Management!!
                                                 enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice: 2
                                                              Member's registred Info
Do you want to see all members?? - press 1
Do you want to see specific members?? - press 2
Enter 1 or 2 : 1
                                                              All Member Information
Members No: 1
Name: Ragesh.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
Members No: 2
Name: Vivek M G
Phone Number: 7904388983
Email-1d: vm45128srmist.edu.in
Member Since: 2022-12-08
```

```
Welcome to Library Management!!
enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
                                                                 enter 1 : To Register New Members
enter your choice: 1
                                                                    Registration for New Members
Enter Name: R.Hari Arvavindh
Enter Phone No: 8838721870
Enter Email-Id: ha7014@srmist.edu.in
                                                                    Registered successfully !!
Welcome to Library Management!!
enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                                      Deletion of Member info
Do you want to see available??- press 1
Do you want to Exit this menu - press 0
Enter 1 or 0 : 1
Members No: 1
Name: Ragesh.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
Members No: 2
members No: 2
Name: Vivek M G
Phone Number: 7904388983
Email-Id: vm45120srmist.edu.in
Member Since: 2022-12-08
Members No: 3
Name: R.Hari Arvavindh
Phone Number: 8838721870
Email-Id: ha7014@srmist.edu.in
Member Since: 2022-12-08
Do you want to Delete specific Member data??
Enter 1 for yes: 1
enter your ID from the above table display: 3
                                                                           Deletion Done!!
```

```
Welcome to Library Management!!
enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
                                                               enter 1 : To Register New Members
enter your choice:
                                                                    Member's registred Info
Do you want to see all members?? - press 1
Do you want to see specific members?? - press 2
Enter 1 or 2 : 1
                                                                      All Member Information
Members No: 1
Name: Ragesh.G
Phone Number: 6383976292
Email-Id: rg5513@srmist.edu.in
Member Since: 2022-12-01
Members No: 2
Name: Vivek M G
Phone Number: 7904388983
Email-Id: vm4512@srmist.edu.in
Member Since: 2022-12-08
Welcome to Library Management!!
enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add hew Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                            5
                                     Registration of new book
Enter the Name of the book:
Enter Author name: Sivaramakrishna Das
Enter No of books came in: 100
                                                                    Registered successfully !!
Welcome to Library Management!!
enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                                             Book Info
Do you want to see all available books information?? - press 1
Do you want to see specific books?? - press 2
Do you want to Exit this menu - press \mathbf{0}
Enter 1 or 2 or :
                                                                       All Available Books
Book Name: Programming in ANSI C
Book Author: E Balagurusamy
No.of Books: 100
Book Id: 2
Book Name: Engineering Mathematics
Book Author: Sivaramakrishna Das
No.of Books: 100
```

```
Welcome to Library Management!!
                                                    enter 1 : To Register New Members
                                                  enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 4 : TO Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                               Issuing book
Enter the Book ID:
Book title: Programming in ANSI C
Book Availability: Available
Enter member id: 1
                                                       Issued the book Sucessfully
                                                                Book Info
Do you want to see all available books information?? - press 1
Do you want to see specific books?? - press 2
Do you want to Exit this menu - press 0
Enter 1 or 2 or : 1
                                                          All Available Books
Book Id: 1
Book Name: Programming in ANSI C
Book Author: E Balagurusamy
No.of Books: 99
Book Id: 2
Book Name: Engineering Mathematics
Book Author: Sivaramakrishna Das
No.of Books: 100
                                                     Welcome to Library Management!!
                                                    enter 1 : To Register New Members
                                                  enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
                                             enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                              Issuing book
Enter the Book ID: 1
Book title: Programming in ANSI C
Book Availability: Available
Enter member id: 1
                                                  Only One Book is allowed per Member
Welcome to Library Management!!
enter your choice:
                                                               Issuing book
Enter the Book ID:
Book title: Engineering Mathematics
Book Availability: Available
Enter member id:
                                                       Issued the book Sucessfully
```

```
Welcome to Library Management!!
                                                     enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
                                                       enter 4 : To Delete Customer's Data
enter 4: To Delete Customer's Data
enter 5: To Add New Book Details
enter 6: To View Available Books in The Library
enter 7: Issuing the book
enter 8: Return of The Issued Book
enter 9: Exit
enter your choice:
                                                              Return of issued Book
Enter Member's No:
                         1
                                                              Issued Book Details
Book Name: Programming in ANSI C
Member No: 1
Issued Date: 2022-12-08
Return Date: 2022-12-22
Enter 1 to confrim Return:
                                                       Return within Time No Additional fee
Welcome to Library Management!!
                                                     enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                             Return of issued Book
Enter Member's No:
                        2
                                                             Issued Book Details
Book Name: Engineering Mathematics
Member No: 2
Issued Date: 2022-11-01
Return Date: 2022-11-15
Enter 1 to confrim Return:
                                                          Return of the book is late!!
Welcome to Library Management!!
                                                       enter 1 : To Register New Members
                                                     enter 2: To View Existing Members
enter 3: To Update Members Infomation
enter 4: To Delete Customer's Data
                                                enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
                                                             Return of issued Book
Enter Member's No:
                                                       No Return for the given Member No
Welcome to Library Management!!
                                                     enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
    enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit
enter your choice:
Left a space/Maybe Wrong Option Enter Correct Choice !! :D
                                                         Welcome to Library Management!!
                                                        enter 1 : To Register New Members
enter 1: To Register New Members
enter 2: To View Existing Members
enter 3: To Update Members Infomation
enter 4: To Delete Customer's Data
enter 5: To Add New Book Details
enter 6: To View Available Books in The Library
enter 7: Issuing the book
enter 8: Return of The Issued Book
enter 9: Exit
enter your choice:
                        10
Left a space/Maybe Wrong Option Enter Correct Choice !! :D
```

Welcome to Library Management!!

enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit

enter your choice:
Left a blank...Enter the correct Choice!! :D

Welcome to Library Management!!

enter 1 : To Register New Members
enter 2 : To View Existing Members
enter 3 : To Update Members Infomation
enter 4 : To Delete Customer's Data
enter 5 : To Add New Book Details
enter 6 : To View Available Books in The Library
enter 7 : Issuing the book
enter 8 : Return of The Issued Book
enter 9 : Exit

enter your choice: 9

Session over

#### **Conclusion**

In conclusion, the Library Management System is a powerful tool that can help libraries manage their resources and services more efficiently. It provides a comprehensive set of features that enable libraries to track and manage their resources, patrons, and services. The system also provides an easy-to-use interface that allows library staff to quickly access and update information. The system is also highly customizable, allowing libraries to tailor the system to their specific needs. Overall, the Library Management System is an invaluable tool for libraries of all sizes.