

Project Report  
on  
Library Management  
For  
AISSCE \_\_\_\_\_ Examination



As a part of the \_\_\_\_\_ ( )

**SUBMITTED BY**

\_\_\_\_\_

Roll No. \_\_\_\_\_

Under the Guidance of

\_\_\_\_\_

**Tools Used**

<b>Front End</b>	<b>:</b>	<b>PYTHON</b>
<b>Back End</b>	<b>:</b>	<b>CSV FILE</b>

# ACKNOWLEDGEMENT

The submission of the project report gives me an opportunity to convey my gratitude all those who have helped me reach a stage where I have immense confidence to launch my carrier in the competitive world of Information Technology.

I have no second thought in admitting, that it is my respected teacher who has played the most significant role in shaping my career and I would be miserably failing in my duty if don't extend my heart filled gratitude to them.

First and foremost I would like to express my profound gratitude and sincere acknowledgement to \_\_\_\_\_ . Computer have been a source of perpetual inspiration to me, gently guiding and paving my way towards a bright career throughout my project. I was very fortunate to have them as my project guide also. They were willing to give all kind of support and encouragement. Their parental kind of love that they extend towards every students in the department and the concern they show has left an indelible impression on me.

My special thanks to -----, **Principal** ----- for providing these facilities in the department.

\_\_\_\_\_

# CERTIFICATE

This is to certify that the Project entitled **STUDENT MANAGEMENT** is a bonafide work done by \_\_\_\_\_ of class XII \_\_\_\_\_ Session \_\_\_\_\_ in partial fulfilment of CBSE'S AISSCE Examination \_\_\_\_\_ and has been carried out under my direct supervision and guidance. This report or a similar report on the topic has not been submitted for any other examination and does not form a part of any other course undergone by the candidate.

\_\_\_\_\_  
Board Roll No. \_\_\_\_\_

\_\_\_\_\_  
PGT (Computer Sci.)

# PREFACE

The computers have gained a lot of importance in the past five decades. Most of our day-to-day jobs are being influenced by the use of computers. Now a day, computers are used for performing almost every function, which were performed by humans in the past. In some areas such as science and technology, targets can't be achieved without the use of computers. The characteristics that make the computer so important include its extra ordinary speed, large storage capacity, accuracy and consistency.

Today computers play a great role in various industries and a large number of industries are using computers for various application such as maintaining cashbook, sales book, purchase book and other books of accounts. Computers can also be used for the designing of various products. Computers provide many options for the designing of products.

The analysis of the project has been undertaken with utmost sincerity and honesty and we will be extremely satisfied if the effort is appreciated.

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# **SRS**

**Software Requirements  
Specification**



## **Proposed system**

All the four activities of systems have been automated and efforts have been made to minimize the manual working.

### **Benefits Of Purposed System: -**

#### **1. Less Paper Work**

The paper work is reduced to minimal level. Computer prepares the lists of customers.

#### **2. No Manual Work.**

There is no manual work. All the processes are done through computer.

#### **3. Record of students.**

There is record of all the students who got registered.

#### **4. Register Maintenance is Easier**

Register can now easily be maintained by producing a report with a format of adding students' records.

#### **5. Data Is Not Scattered**

Data is now stored at one place. Any information regarding anything can be easily available to the user.

#### **6. User-friendly Software**

The software is be menu-driven and is very easy to use.

#### **7. Flexibility**

The system is more flexible than the manual system being used presently.

#### **8. Beneficial**

The system is easy to use and reduces the user's workload a lot. It provides timely and accurate information and there is automatic generation of reports.



## **FEASIBILITY STUDY**

During the course of completion of this project work, the complete analysis of proposed system was done. In the analysis task, a complete care about the feasibility of the proposed system was taken. The following feasibility analyses were carried out during the course of this project work on call management system for customer care:

1. Economical feasibility
2. Technical feasibility
3. Operational feasibility

### **Economic Feasibility:-**

Economic analysis is the most frequently used method for evaluating the effectiveness of a candidate system. The proposed system is economically feasible because the benefits and the savings that are expected from a candidate system outweigh the cost incurred. In this case we are getting the intangible benefits in terms of low cost of maintenance of data, less redundancy and getting the quick results.

### **Technical Feasibility:-**

The existing Hardware and Software facilities support the proposed system. Computer and storage media are available and software can be developed.

### **Hardware configuration:**

a) Processor	:	i3
b) Memory	:	2 GB RAM
c) HD capacity	:	1 TB

### **Software configuration: -**

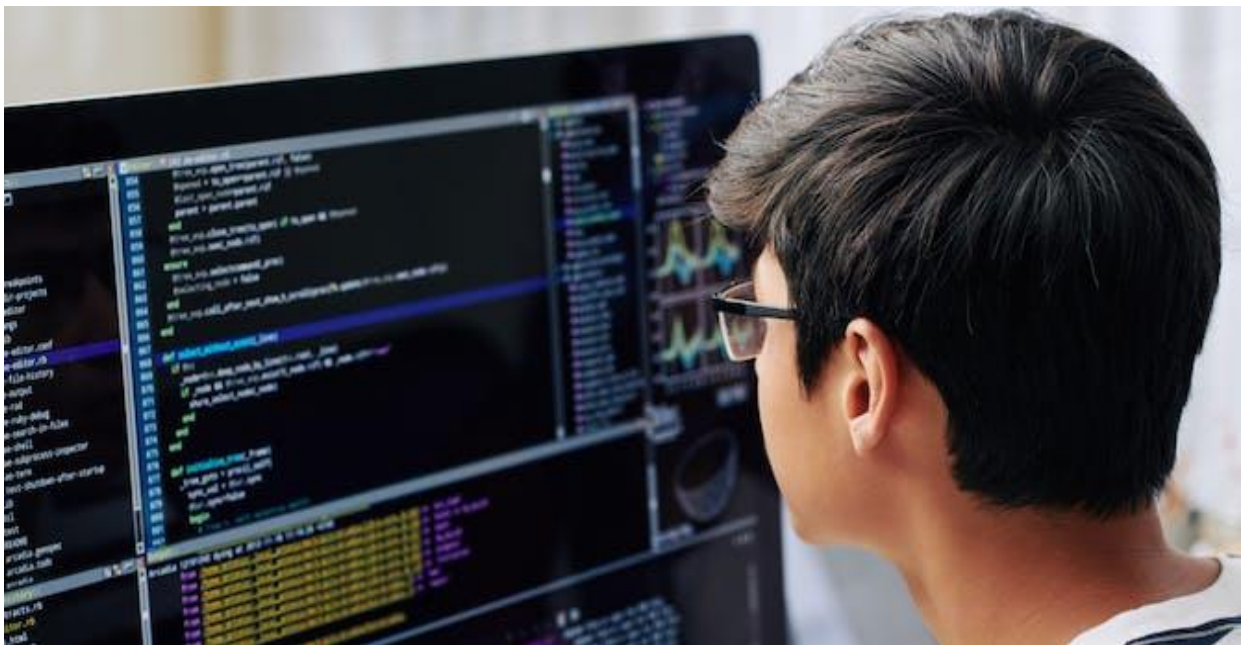
a) Operating system	:	Windows 10
b) Back end	:	csv files
c) Front end	:	Python

There is nothing which is not technically feasible.

### **Operational feasibility: -**

As in the case of present system the entire work is being done manually. So the data being scattered, information retrieval becomes difficult and maintaining database is also very tedious. In case of proposed system, entire work will be done automatically. So the above details regarding the feasibility study show that the design of the proposed system is very effective.

# CODING



```
import os
import csv
def addBook():
    print("Add a new Book Record")
    print("=====")
    f=open('library.csv','a',newline='\r\n')
    s=csv.writer(f)
    bookid=int(input('Enter book id='))
    bookname=input('Enter book name=')
    bookauthor=input('Enter author name=')
    price=float(input('Enter price='))
    copies=float(input('Enter number of copies='))
```

```
rec=[bookid,bookname,bookauthor,price,copies]
```

```
s.writerow(rec)
```

```
f.close()
```

```
print("Book Record Saved")
```

```
input("Press any key to continue..")
```

```
def modifyBook():
```

```
    print("Modify a Book Record")
```

```
    print("=====")
```

```
    f=open('library.csv','r',newline='\r\n')
```

```
    f1=open('temp.csv','w',newline='\r\n')
```

```
    f1=open('temp.csv','a',newline='\r\n')
```

```
    r=input('Enter bookid whose record you want to
```

```
modify=')
```

```
    s=csv.reader(f)
```

```
    s1=csv.writer(f1)
```

```
    for rec in s:
```

```
        if rec[0]==r:
```

```
print("-----")
```

```
print("Book id=",rec[0])
```

```
print("Book Name=",rec[1])
```

```
print("Author=",rec[2])
```

```
print("Price=",rec[3])
```

```
print("Number of copies=",rec[4])
```

```
print("-----")
```

```
choice=input("Do you want to modify this Book  
Record(y/n)=")
```

```
if choice=='y' or choice=='Y':
```

```
    bookid=int(input('Enter new book id='))
```

```
    bookname=input('Enter new book name=')
```

```
    bookauthor=input('Enter new author name=')
```

```
    price=float(input('Enter new price='))
```

```
    copies=float(input('Enter new number of  
copies='))
```

```
rec=[bookid,bookname,bookauthor,price,copies]
    s1.writerow(rec)
    print("Book Record Modified")
else:
    s1.writerow(rec)
else:
    s1.writerow(rec)
f.close()
f1.close()
os.remove("library.csv")
os.rename("temp.csv","library.csv")

input("Press any key to continue..")
```

```
def deleteBook():
```

```
    f=open('library.csv','r',newline='\r\n')
```

```
    f1=open('temp.csv','w',newline='\r\n')
```



```
f1=open('temp.csv','a',newline='\r\n')
r=input('Enter bookid whose record you want to
delete')
s=csv.reader(f)
s1=csv.writer(f1)
for rec in s:
    if rec[0]==r:
        print("-----")
        print("Book id=",rec[0])
        print("Book Name=",rec[1])
        print("Author=",rec[2])
        print("Price=",rec[3])
        print("Number of copies=",rec[4])
        print("-----")
        choice=input("Do you want to delete this Book
Record(y/n)")
        if choice=='y' or choice=='Y':
            pass
```

```
        print("Book Record Deleted....")
    else:
        s1.writerow(rec)
    else:
        s1.writerow(rec)
f.close()
f1.close()
os.remove("library.csv")
os.rename("temp.csv","library.csv")

input("Press any key to continue..")
```

```
def searchbook():
```

```
    print("Search a Book Record")
```

```
    print("=====")
```

```
    f=open('library.csv','r',newline='\r\n') #Remove new
```

```
line character from output
```

```
    r=input('Enter bookid you want to search')
```

```
s=csv.reader(f)
```

```
for rec in s:
```

```
    if rec[0]==r:
```

```
        print("-----")
```

```
        print("Book id=",rec[0])
```

```
        print("Book Name=",rec[1])
```

```
        print("Author=",rec[2])
```

```
        print("Price=",rec[3])
```

```
        print("Number of copies=",rec[4])
```

```
        print("-----")
```

```
f.close()
```

```
input("Press any key to continue..")
```

```
def listallbooks():
```

```
    print("List of All Books")
```

```
    print("=====")
```

```
    f=open('library.csv','r',newline='\r\n') #Remove new
```

```
line character from output
```

```
    s=csv.reader(f)
```

```
i=1
for rec in s:
    print(rec[0],end="\t\t")
    print(rec[1],end="\t\t")
    print(rec[2],end="\t\t")
    print(rec[3],end="\t\t")
    print(rec[4])
    i+=1
f.close()
print("-----")
input("Press any key to continue..")
```

```
def mainmenu():
    choice=0
    while choice!=6:
        print("\n")
        print("|-----|")
        print("| Library Management System      |")
```

```
print("| ----- |")
```

```
print('\n')
```

```
print("*****")
```

```
print("|      Main Menu      |")
```

```
print("*****")
```

```
print("1. Add a new Book Record")
```

```
print("2. Modify Existing Book Record")
```

```
print("3. Delete Existing Book Record")
```

```
print("4. Search a Book")
```

```
print("5. List all Books")
```

```
print("6.Exit")
```

```
print("-----")
```

```
choice=int(input('Enter your choice'))
```

```
if choice==1:
```

```
    addBook()
```

```
elif choice==2:
```

```
        modifyBook()
elif choice==3:
        deleteBook()
elif choice==4:
        searchbook()
elif choice==5:
        listallbooks()
elif choice==6:
        print("Software Terminated.....")
        break
mainmenu()
```

# **SYSTEM SPECIFICATIONS**





# SYSTEM SPECIFICATIONS

## HARDWARE SPECIFICATIONS

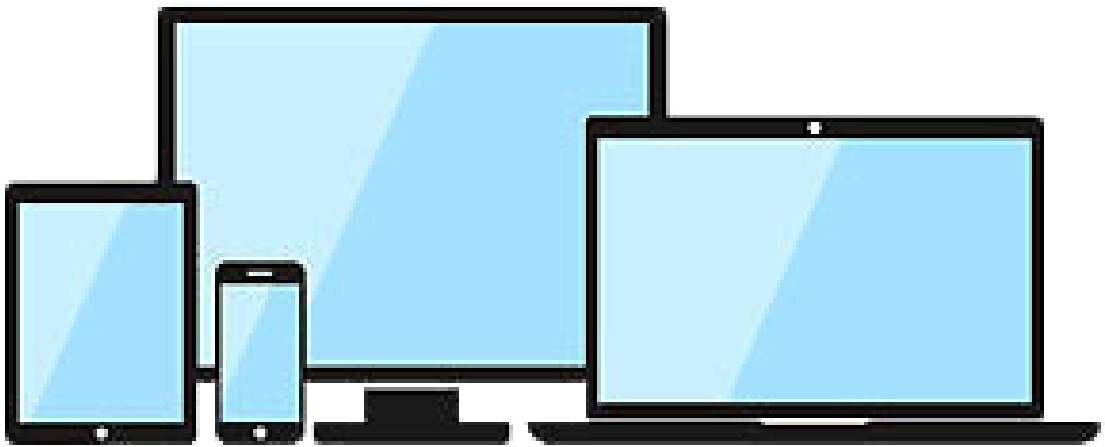
The following is the hardware specification of the system on which the software has been developed:-

Operating System	:	Windows 7/10
Machine Used	:	Pentium Dual Core Processor 2.6 GHz, 2 GB RAM, 500 GB Hard Disk

## SOFTWARE SPECIFICATIONS

Front End Used	:	Python
Backend Used	:	CSV/MS Excel

# OUTPUT SCREENS



## Screen 1

```
|-----|
| Library Management System |
|-----|

*****
|               Main Menu               |
*****
1. Add a new Book Record
2. Modify Existing Book Record
3. Delete Existing Book Record
4. Search a Book
5. List all Books
6.Exit
-----
Enter your choice|
```

## Screen 2

```
*****
|               Main Menu               |
*****
1. Add a new Book Record
2. Modify Existing Book Record
3. Delete Existing Book Record
4. Search a Book
5. List all Books
6.Exit
-----
Enter your choice1
Add a new Book Record
=====
Enter book id=222
Enter book name=Basics of HTML
Enter author name=Dr. Sunil Kumar Vats
Enter price=354
Enter number of copies=10
Book Record Saved
Press any key to continue..
```

## Screen 3

```
*****
|           Main Menu           |
*****
1. Add a new Book Record
2. Modify Existing Book Record
3. Delete Existing Book Record
4. Search a Book
5. List all Books
6.Exit
-----
Enter your choice2
Modify a Book Record
=====
Enter bookid whose record you want to modify=222
-----
Book id= 222
Book Name= Basics of HTML
Author= Dr. Sunil Kumar Vats
Price= 354.0
Number of copies= 10.0
-----
Do you want to modify this Book Record(y/n)=n
Press any key to continue..|
```

---

## Screen 4

```
*****
|                               |
|           Main Menu           |
|                               |
*****
1. Add a new Book Record
2. Modify Existing Book Record
3. Delete Existing Book Record
4. Search a Book
5. List all Books
6.Exit
-----
Enter your choice3
Enter bookid whose record you want to delete222
-----
Book id= 222
Book Name= Basics of HTML
Author= Dr. Sunil Kumar Vats
Price= 354.0
Number of copies= 10.0
-----
Do you want to delete this Book Record(y/n)y
Book Record Deleted....
Press any key to continue..|
```

## Screen 5

```
*****
|           Main Menu           |
*****
1. Add a new Book Record
2. Modify Existing Book Record
3. Delete Existing Book Record
4. Search a Book
5. List all Books
6.Exit
-----
Enter your choice4
Search a Book Record
=====
Enter bookid you want to search223
-----
Book id= 223
Book Name= Computer Network & Internet
Author= Dr. Sunil Kumar Vats
Price= 365.0
Number of copies= 20.0
-----
Press any key to continue..|
```

## Screen 6

```
*****
|           Main Menu           |
*****
1. Add a new Book Record
2. Modify Existing Book Record
3. Delete Existing Book Record
4. Search a Book
5. List all Books
6.Exit
-----
Enter your choice5
List of All Books
=====
222          Basics of HTML          Dr. Sunil Kumar Vats          254.0
10.0
223          Computer Network & Internet          Dr. Sunil Kumar Vats
365.0        20.0
224          Exam Idea                Dr. Sunil Kumar Vats          258.0
25.0
-----
Press any key to continue..
```

## Screen 7

```
|-----|
| Library Management System |
|-----|

*****
|           Main Menu           |
*****
1. Add a new Book Record
2. Modify Existing Book Record
3. Delete Existing Book Record
4. Search a Book
5. List all Books
6.Exit
-----
Enter your choice6
Software Terminated.....
```

