

A PROJECT REPORT  
ON  
STUDENT DATABASE MANAGEMENT SYSTEM  
FOR  
AISSCE 2020 EXAMINATION  
As a part of the Informatics Practices Course (065)

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**CERTIFICATE**

This is to certify that the Project / Dissertation entitled **STUDENT DATABASE MANAGEMENT SYSTEM** is a bonafide work done by **Mr. / Ms. ....** of class **XII** in partial fulfillment of CBSE's AISSCE Examination 2019-20 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.

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Signature of Principal

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Place: JP Nagar

Date:.....

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## **ABSTRACT**

This is a project on the topic 'Student Database Management System'. In this project we have tried to design an interface for an efficient student database management.

By using this software, we can store all details of students in a database using python interface. Here, we can insert new student details, updating existing student details using roll number, deleting existing student details using roll number, creating new database, creating new table(s). We can also search for specific record of a student using his/her roll number.

## **SYSTEM REQUIREMENTS**

### **Hardware Components**

1. VGA Monitor
2. Qwerty keyboard
3. 2GB RAM
4. 2.6 GHz Processor
5. Graphics card

### **Software Components**

1. Windows 7
2. Python 3.7 with suitable modules
3. MySQL Command Client

## DATABASE DESIGN

Name of the database of this project: - **Student Database Management System**

Tables created for this project:-

1. **Student**
2. **Users**
3. **Admin**

### Student Table

```
mysql> desc student;
```

Field	Type	Null	Key	Default	Extra
rollno	int(11)	NO	PRI	NULL	
sname	varchar(20)	YES		NULL	
marks	decimal(5,2)	YES		NULL	
dob	date	YES		NULL	

```
4 rows in set (0.11 sec)
```

```
mysql> select *from student;
```

```
+-----+-----+-----+-----+
| rollno | sname | marks | dob      |
+-----+-----+-----+-----+
|      1 | ram   | 55.00 | 2000-01-02 |
|      2 | rama  | 65.00 | 2001-03-25 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```



**CODING**

```
import pymysql

def create():

    print("a.DataBase CReation")

    print("b. Table Creation")

    ch1=input('Enter choice')

    if(ch1=='a'):

        db_create()

    elif(ch1=='b'):

        tab_create()

    else:

        print("Invalid choice::")


def db_create():

    conn=pymysql.connect(host='localhost',user='root',password='manager')

    a=conn.cursor()

    db_name=input('Enter db name:')
```

```
a.execute('create database '+db_name)

print('Database has been created successfully')

return db_name

conn.commit()
```

```
def tab_create():
```

```
conn=pymysql.connect(host='localhost',user='root',password='manager',db='pract')
```

```
a=conn.cursor()
```

```
tab_name=input('Enter table name:')
```

```
a.execute('create table '+tab_name+'(rollno int primary
key,sname varchar(20),marks decimal(5,2),dob date);')
```

```
#create table student(rollno int primary key,sname
varchar(20),marks decimal(5,2),dob date);
```

```
print('Table has been created successfully')
```

```
conn.commit()
```

```
def search():
```

```
conn=pymysql.connect(host='localhost',user='root',password='manager',db='pract')

a=conn.cursor()

r=int(input('Enter roll number:'))

a.execute("select *from student where rollno="+ str(r))

data=a.fetchall()

if(data):

    print('Existing details are::')

    L=[]

    for i in data:

        for j in i:

            L.append(j)

    print('Roll number=',L[0])

    print('Name=',L[1])

    print('Marks=',L[2])

    print('Date of birth=',L[3])

    conn.commit()

else:
```

```
print('details not found!!!')
```

```
def insert():
```

```
conn=pymysql.connect(host='localhost',user='root',password='manager',db='pract')
```

```
    a=conn.cursor()
```

```
    c=1
```

```
    no=int(input('Enter howmany::'))
```

```
    while(c<=no):
```

```
        r=int(input('Enter roll number:'))
```

```
        n=input('Enter name:')
```

```
        m=input('Enter marks:')
```

```
        d=input('Enter dob:')
```

```
        query='insert into student values ('+str(r)+','+n+', '+m+', '+d+')'
```

```
        #insert into student values (1,"ram",87,"221-12-23",
```

```
        a.execute(query)
```

```
        print('success')
```

```
c+=1
```

```
conn.commit()
```

```
def disp():
```

```
conn=pymysql.connect(host='localhost',user='root',password='manager',db='pract')
```

```
a=conn.cursor()
```

```
a.execute("select *from student")
```

```
data=a.fetchall()
```

```
for i in data:
```

```
    for j in i:
```

```
        print(j,end='\t')
```

```
    print()
```

```
conn.commit()
```

```
def update():
```

```
conn=pymysql.connect(host='localhost',user='root',password='manager',db='pract')

a=conn.cursor()

r=input('Enter roll number of student to update details')

query='Select *from student where rollno='+r

a.execute(query)

data=a.fetchall()

if(data):

    print('Existing details are::')

    L=[]

    for i in data:

        for j in i:

            L.append(j)

    print('Roll number=',L[0])

    print('Name=',L[1])

    print('Marks=',L[2])

    print('Date of birth=',L[3])

    print('\nEnter the new details::')
```

```
n=input('Enter New name:')
m=input('Enter new marks:')
d=input('Enter new dob:')

query='update student set
sname="'+n+'",marks='+m+',dob="'+d+'" where rollno='+r

#update student set sname="abc",marks=99,dob="2000-05-
05" where rollno=3

a.execute(query)

print('updated successfully:!!')

conn.commit()

else:

    print('roll number ',r,' doesnt exists')

    conn.commit()

def delete():

conn=pymysql.connect(host='localhost',user='root',password='man
ager',db='pract')

a=conn.cursor()
```

```
r=input('Enter roll number of student to details details')
a.execute('select *from student where rollno='+r)
data=a.fetchall()
if(data):
    ch=int(input('Are you sure to delete entire table
content ...press 1 if yes...press any key if no'))
    if(ch==1):
        query='delete from student where rollno='+r
        a.execute(query)
        print('roll number ',r,' details has been deleted
successfully:::')
        conn.commit()
    else:
        print('roll number ',r,' details not deleted based on your
confirmation:::')
else:
    print('roll number ',r,' doesnot exists:::')
print("\n"*20)
```



```
print("\t\t\t\t:::STUDENT MANAGEMENT SYSTEM:::\n\n")
```

```
while(1):
```

```
print("\t\t\t1.Create")
```

```
print("\t\t\t2.Search")
```

```
print("\t\t\t3.Update")
```

```
print("\t\t\t4.Delete")
```

```
print("\t\t\t5.Insert")
```

```
print("\t\t\t6.Display")
```

```
print("\t\t\t7.Exit")
```

```
#print("\n"*3)
```

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

```
if(ch==1):
```

create()

```
elif(ch==2):
```

## search()

```
elif(ch==3):
```

update()

```
elif(ch==4):  
    delete()  
  
elif(ch==5):  
    insert()  
  
elif(ch==6):  
    disp()  
  
else:  
    print('\n'*20)  
    print('\t\t\tThanks For using Student Database Management  
Software')  
    print('\t\t\t\t\t©Sri Chaitanya 2020')  
    print('\n'*10)  
    break
```

## OUTPUT SCREEN

### Screen-1: WELCOME SCREEN

**:::STUDENT MANAGEMENT SYSTEM:::**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice|

---

**Screen-2: Create option****:::STUDENT MANAGEMENT SYSTEM:::**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice|

a.DataBase CReation

b. Table Creation

Enter choice|

**Screen-3: Database Creation**

**:::STUDENT MANAGEMENT SYSTEM:::**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice**1**

a.DataBase CReation

b. Table Creation

Enter choice**a**

Enter db name:**pract**

Database has been created successfully

**Screen-4: Table Creation****:::STUDENT MANAGEMENT SYSTEM:::**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice**1**

a.DataBase CReation

b. Table Creation

Enter choice**b**

Enter table name:**student**

Table has been created successfully

## **Screen-5: Inserting data into Table**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice:5  
Enter howmany::3  
Enter roll number:1  
Enter name:ram  
Enter marks:55  
Enter dob:2000-02-25  
success  
Enter roll number:2  
Enter name:rama  
Enter marks:65  
Enter dob:1999-12-31  
success  
Enter roll number:3  
Enter name:raman  
Enter marks:98  
Enter dob:1997-02-23  
success

### Screen-6: Display Entire Table

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice**6**

<b>1</b>	<b>ram</b>	<b>55.00</b>	<b>2000-02-25</b>
<b>2</b>	<b>rama</b>	<b>65.00</b>	<b>1999-12-31</b>
<b>3</b>	<b>raman</b>	<b>98.00</b>	<b>1997-02-23</b>

### Screen-7: Search(Successful)

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice**2**

Enter roll number:**3**

Existing details are::

Roll number= **3**

Name= **raman**

Marks= **98.00**

Date of birth= **1997-02-23**

### Screen-8: Search(Un Successful)

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice2

Enter roll number:5  
details not found::!

### Screen-8: Update (Successful if details Exists)

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice3

Enter roll number of student to update details3

Existing details are::

Roll number= 3

Name= raman

Marks= 98.00

Date of birth= 1997-02-23

Enter the new details::

Enter New name:raman

Enter new marks:77

Enter new dob:1997-02-23

updated successfully::!!



**Screen-8 (a): After Successful Update Search**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice**2**

Enter roll number:**3**

Existing details are::

Roll number= **3**

Name= **raman**

Marks= **77.00**

Date of birth= **1997-02-23**

**Screen-9: Update (UnSuccessful if details doesn't Exists)**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice**3**

Enter roll number of student to update details**5**

roll number **5** doesnt exists

**Screen-10 (a) : Delete (Successful if details Exists)**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice4

Enter roll number of student to details details3

Are you sure to delete entire table content ...press 1 if yes...press any key if no1  
roll number 3 details has been deleted successfully::

**Screen-10 (b) : Searching for deleted details**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice2

Enter roll number:3

details not found:::!

**Screen-11 (a) : Delete (UnSuccessful if details Doesn't Exists)**

- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice4

Enter roll number of student to details details4

**Screen-11 (b): Delete (un Successful if not confirmed but details Exists)**

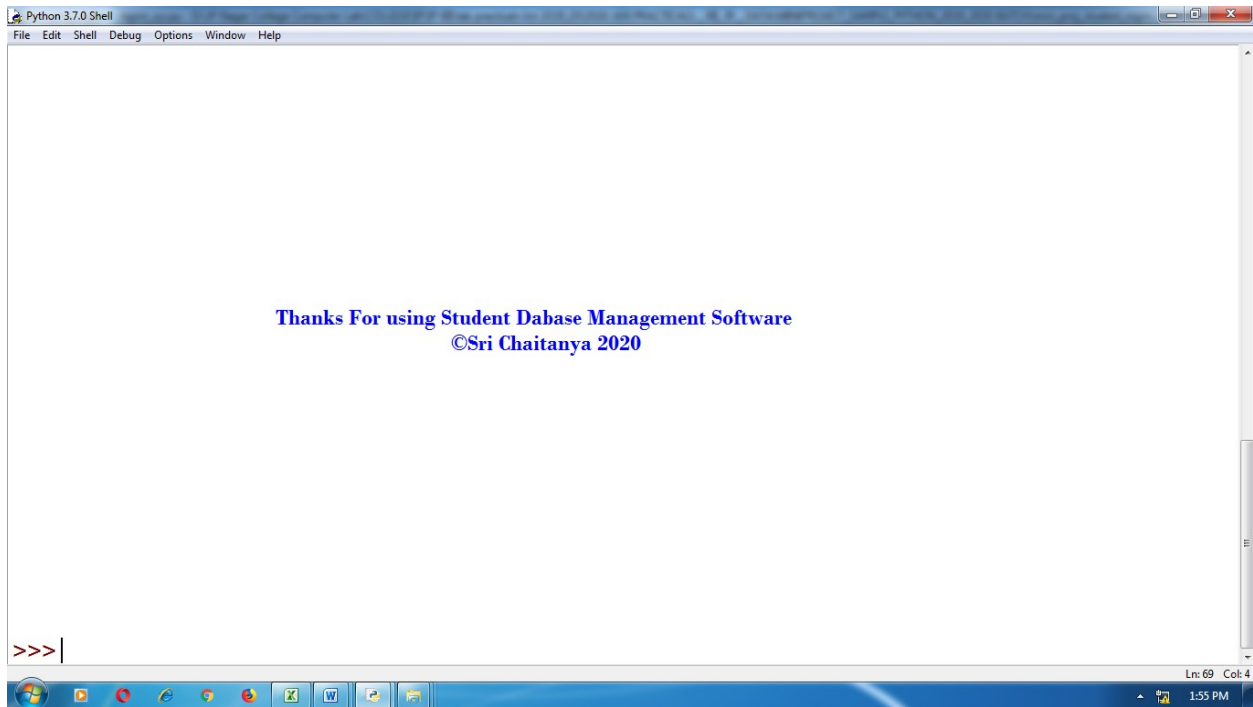
- 1.Create
- 2.Search
- 3.Update
- 4.Delete
- 5.Insert
- 6.Display
- 7.Exit

Enter choice4

Enter roll number of student to details details2

Are you sure to delete entire table content ...press 1 if yes...press any key if no2  
roll number 2 details not deleted based on your confirmation::

**Screen-12:Exit Screen**



## **Bibliography:**

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