KENDRIYA VIDYALAYA

Tirumalagiri, Secunderabad

Session : 2020-21

COMPUTER SCIENCE

Project Report on

SCHOOL MANAGEMENT

Submitted To :
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Class : XII - 'A'

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CERTIFICATE

This is to certify that NALLANI SHRUTHI of class XII-'A' of KENDRIYA VIDYALAYA TIRUMALAGIRI , SEC'BAD has done her project on SCHOOL MANAGEMENT SYSTEM under my supervision. She has taken interest and has shown at most sincerity in completion of this project.

I certify this Project up to my expectation & as per guidelines issued by **CBSE , NEW DELHI.**

INTERNAL EXAMINER **EXTERNAL EXAMINER**

PRINCIPAL

ACKNOWLEDGEMENT

In the accomplishment of this project successfully, I would like to express a deep sense of thanks and gratitude to our Computer Science teacher Mrs. Tom Josina ma'am for guiding me immensely through the course of the project. Her suggestions and instructions has served as the major contributor towards the completion of the project.

Last but not least, I would like to thank all those who had supported me directly and indirectly in any manner for the completion of this project.

NALLANI SHRUTHI

XII – 'A'

INTRODUCTION

The project is based on *SCHOOL MANAGEMENT SYSTEM* which handles all records of students and staff working in the school.
This project is designed to add new details, update details, delete details and it is also capable of searching details.

To store the record, MYSQL server is used by connecting MYSQL with Python through pymysql or mysql.connector as a connector. There are few modules used in different categories to make the program simple.

STRUCTURE OF TABLES

1. Admission Table :

```
mysql> desc admission;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| Admission_Number | int         | NO   | PRI | NULL    |       |
| Student_Name     | varchar(20) | YES  |     | NULL    |       |
| Class            | int         | YES  |     | NULL    |       |
| Father_Name      | varchar(20) | YES  |     | NULL    |       |
| Mother_Name      | varchar(20) | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql>
```

2. Student-12A Table :

```
mysql> desc student_12A;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| Roll_No      | int         | NO   | PRI | NULL    |       |
| Student_Name | varchar(20) | YES  |     | NULL    |       |
| Subject1     | varchar(10) | YES  |     | NULL    |       |
| Subject2     | varchar(10) | YES  |     | NULL    |       |
| Subject3     | varchar(20) | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql>
```

3. Teacher Table :

```
mysql> desc teacher;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| Teacher_No   | int         | NO   | PRI | NULL    |       |
| Teacher_Name | varchar(20) | YES  |     | NULL    |       |
| Teacher_Job  | varchar(20) | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)

mysql>
```

4. Fees Table :

```
mysql> desc fees;
+----------------+-------------+------+-----+---------+-------+
| Field          | Type        | Null | Key | Default | Extra |
+----------------+-------------+------+-----+---------+-------+
| Admission_No   | int         | NO   | PRI | NULL    |       |
| Student_Name   | varchar(20) | YES  |     | NULL    |       |
| Amount_of_Fees | int         | YES  |     | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)

mysql>
```

SOURCE CODE

main_menu.py

```
import main_menu
import admission
import student_data
import teacher_data
import fee_details
while True:
    print("\t\t----------------------------------------------------------------------")
    print("\t\ **WELCOME TO SCHOOL MANAGEMENT SYSTEM** ")
    print("\t\----------------------------------------------------------------------")
    print("\t\t----------------------------------------------------------------------")
    print("\t\t ***KENDRIYA VIDYALAYA TIRUMALAGIRI, SECUNDERABAD***")
    print("\t\t----------------------------------------------------------------------")
    print("1 : Admission Management")
    print("2 : Student Data")
    print("3 : Teachers Data")
    print("4 : Fee Details")
    print("5 : Exit")
    print("\t\t----------------------------------------------------------------------")
    choice=int(input("Enter your choice:"))
    if choice==1:
        admission.ADM_MENU()
```

```
    elif choice==2:
        student_data.STU_MENU()
    elif choice==3:
        teacher_data.TCH_MENU()
    elif choice==4:
        fee_details.FEE_MENU()
    elif choice==5:
        print("***Thanks for visiting School Management***")
        break
    else:
        print("Error : Invalid choice ..... Try Again .....")
        cont=input("Press any key to continue:")
```

admission.py

```
import main_menu
import pymysql as co
def ADM_MENU():
        while True:
            print("\t\t-------------------------------------------------------")
            print("\t\t***** WELCOME TO ADMISSION MANAGEMENT *****")
            print("-------------------------------------------------------")
            print("\t\t-------------------------------------------------------")
            print("1 : New Admission")
            print("2 : Show Admission Details")
            print("3 : Search the admission record")
            print("4 : Issue TC (Deletion of admission record)")
```

```
            print("5 : Exit")
            print("\t\t-------------------------------------------------------------")
            choice=int(input("Enter your choice :"))
            if choice==1:
                  new_admin()
            elif choice==2:
                  show_admin_details()
            elif choice==3:
                   search_admin_details()
            elif choice==4:
                  delete_admin_details()
             elif choice==5:
                  break
             else:
                  print("Error : Invalid choice ..... Try Again .....")
                  cont=input("Press any key to continue :")
def new_admin():
      mycon=co.connect(host="localhost", user="root", password="123",
                                                                  database="smsdb")
      cursor=mycon.cursor()
      adminno=int(input("Enter Admission Number :"))
      sname=input("Enter student name :")
      clas=int(input("Enter class :"))
      fname=input("Enter Father's Name :")
      mname=input("Enter Mother's Name :")
      query="insert into admission values ({ },'{ }',{ },'{ }','{ }') ;" .format (adminno,
                                          sname, clas,fname, mname)
```

```
        cursor.execute(query)
        mycon.commit()
        print("New Admission record added successfully.")
def show_admin_details():
        mycon=co.connect(host="localhost", user="root", password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        query="select * from admission;"
        cursor.execute(query)
        data=cursor.fetchall()
        for rec in data:
                print(rec)
        mycon.close()

def search_admin_details():
        mycon=co.connect(host="localhost", user="root", password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        adminno=int(input("Enter Admission No. to be searched :"))
        query="select * from admission where  Admission_Number=%s; " % (adminno)
        cursor.execute(query)
        data=cursor.fetchall()
        print(data)
        mycon.close()
```

```
def delete_admin_details():
        mycon=co.connect(host="localhost", user="root", password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        adminno=int(input("Enter Admission No to be deleted :"))
        query="delete from admission where Admission_Number=%s;"%(adminno)
        cursor.execute(query)
        mycon.commit()
        print("Admission record deleted successfully.")
```

student_data.py

```
import main_menu
import pymysql as co
def STU_MENU():
    while True:
        print("\t\t-------------------------------------------------------------------")
        print("\t\t******WELCOME TO STUDENT MANAGEMENT ******")
        print("\t\t-------------------------------------------------------------------")
        print("\t\t-------------------------------------------------------------------")
        print("1 : Add student record")
        print("2 : Show student details")
        print("3 : Search student record")
        print("4 : Delete Student record")
        print("5 : Exit")
        print("\t\t-------------------------------------------------------------------")
        choice=int(input("Enter your choice:"))
        if choice==1:
```

```
            add_student()
        elif choice==2:
            show_student_details()
        elif choice==3:
            search_student_details()
        elif choice==4:
            delete_student_details()
        elif choice==5:
            break
        else:
            print("Error : Invalid choice ..... Try Again .....")
            cont=input("Press any key to continue:")

def add_student():
    mycon=co.connect(host="localhost", user="root",password="123",
                                                    database="smsdb")
    cursor=mycon.cursor()
    sroll=int(input("Enter roll number :"))
    sname=input("Enter student name :")
    sub1=input("Enter subject1 :")
    sub2=input("Enter subject2 :")
    sub3=input("Enter subject3 :")
    query="insert into student_12A values ({ },'{ }','{ }','{ }','{ }');"  .format(sroll,
                                                    sname, sub1, sub2, sub3)
    cursor.execute(query)
    mycon.commit()
    mycon.close()
```

```
            print("Record has been saved in the student table...")


def show_student_details():
            mycon=co.connect(host="localhost",user="root",password="123",
                                                                database="smsdb")
            cursor=mycon.cursor()
            query="select * from student_12A;"
            cursor.execute(query)
            data=cursor.fetchall()
            for rec in data:
                        print(rec)
            mycon.close()


def search_student_details():
            mycon=co.connect(host="localhost",user="root",password="123",
                                                                database="smsdb")
            cursor=mycon.cursor()
            r_no=int(input("Enter Roll Number :"))
            query="select * from student_12A where Roll_No=%s;"%(r_no)
            cursor.execute(query)
            data=cursor.fetchall()
            print(data)
            mycon.close()


def delete_student_details():
            mycon=co.connect(host="localhost",user="root",password="123",
                                                                database="smsdb")
```

```
        cursor=mycon.cursor()
        rno=int(input("Enter Roll Number :"))
        query="delete from student_12A where Roll_No=%s;"%(rno)
        cursor.execute(query)
        mycon.commit()
        mycon.close()
        print("Student record deleted successfully...")
```

teacher_data.py

```
import main_menu
import pymysql as co
def TCH_MENU():
    while True:
        print("\t\t-----------------------------------------------------------")
        print("\t\t**** WELCOME TO TEACHER  MANAGEMENT ****")
        print("\t\t-----------------------------------------------------------")
        print("\t\t-----------------------------------------------------------")
        print("1 : Add new teacher record")
        print("2 : Show teacher details")
        print("3 : Search teacher record")
        print("4 : Delete teacher record")
        print("5 : Exit")
        print("\t\t-----------------------------------------------------------")
        choice=int(input("Enter your choice :"))
        if choice==1:
            add_teacher_details()
```

```
        elif choice==2:
                show_teacher_details()
        elif choice==3:
                search_teacher_details()
         elif choice==4:
                 delete_teacher_details()
          elif choice==5:
                break
        else:
                print("Error : Invalid choice ..... Try Again .....")
                cont=input("Press any key to continue:")

def add_teacher_details():
        mycon=co.connect(host="localhost",user="root",password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        tno=int(input("Enter teacher Number :"))
        tname=input("Enter teacher Name :")
        tjob=input("Enter teacher's Designation :")
        query="insert into teacher values ({ },'{ }','{ }');".format(tno, tname, tjob)
        cursor.execute(query)
        mycon.commit()
        mycon.close()
        print("Record has been saved in the teacher table...")
```

```
def show_teacher_details():
        mycon=co.connect(host="localhost", user="root",password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        query="select * from teacher;"
        cursor.execute(query)
        data=cursor.fetchall()
        for rec in data:
                print(rec)
        mycon.close()

def search_teacher_details():
        mycon=co.connect(host="localhost",user="root",password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        tno=int(input("Enter teacher number :"))
        query="select * from teacher where Teacher_No=%s;"%(tno)
        cursor.execute(query)
        data=cursor.fetchall()
        print(data)
        mycon.close()

def delete_teacher_details():
        mycon=co.connect(host="localhost",user="root",password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        tno=int(input("Enter teacher Number :"))
```

```
        query="delete from teacher where Teacher_No=%s;"%(tno)
        cursor.execute(query)
        mycon.commit()
        print("Teacher record deleted successfully...")
        mycon.close()
```

fee_details.py

```
import main_menu
import pymysql as co
def FEE_MENU():
    while True:
        print("\t\t----------------------------------------------------------")
        print("\t\t**** WELCOME TO FEE MANAGEMENT****")
        print("\t\t----------------------------------------------------------")
        print("\t\t----------------------------------------------------------")
        print("1 : Insert Fees for New Admission")
        print("2 : Show Fee details")
        print("3 : Update Fees")
        print("4 : Exempt Fees")
        print("5 : Exit")
        choice=int(input("Enter your choice:"))
        if choice==1:
            add_fee_details()
        elif choice==2:
            show_fee_details()
        elif choice==3:
```

```
                    update_fee_details()
            elif choice==4:
                    delete_fee_details()
              elif choice==5:
                    break
              else:
                    print("Error : Invalid choice ..... Try Again .....")
                    cont=input("Press any key to continue:")

def add_fee_details():
        mycon=co.connect(host="localhost",user="root",password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        admno=int(input("Enter Admission Number :"))
        sname=input("Enter Student Name :")
        fees=int(input("Enter amount of fees to be paid per quarter :"))
        query="insert into fees values ({ },'{ }',{ });".format(admno, sname, fees)
        cursor.execute(query)
        mycon.commit()
        print("Record has been saved in the fees table...")
        mycon.close()

def show_fee_details():
        mycon=co.connect(host="localhost",user="root", password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        query="select * from fees ;"
```

```
        data=cursor.execute(query)
        data=cursor.fetchall()
        for rec in data:
                print(rec)
        mycon.close()
def update_fee_details():
        mycon=co.connect(host="localhost",user="root", password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        admno=int(input("Enter Admission Number :"))
        fees=int(input("Enter amount of fees to be updated :"))
        query="update fees set Amount_of_Fees={} where  Admission_No='{ }' ;" .
                                                        format(fees,admno)
        cursor.execute(query)
        mycon.commit()
        print("Record updated successfully")
        mycon.close()
def delete_fee_details():
        mycon=co.connect(host="localhost",user="root",password="123",
                                                        database="smsdb")
        cursor=mycon.cursor()
        admno=int(input("Enter Admission Number :"))
        query="delete from fees where Admission_No={ };".format(admno)
        cursor.execute(query)
       mycon.commit()
       print("Fees record deleted successfully...")
       mycon.close()
```

OUTPUT

1. Adding new admission record to admission table

```
Enter your choice:1
                ------------------------------------------------------------------------------------------------
                ************************* WELCOME TO ADMISSION MANAGEMENT ******************************
                ------------------------------------------------------------------------------------------------
                ------------------------------------------------------------------------------------------------
1 : New Admission
2 : Show Admission Details
3 : Search the admission record
4 : Issue TC (Deletion of admission record)
5 : Exit
                ------------------------------------------------------------------------------------------------
Enter your choice :1
Enter Admission Number :36951
Enter student name :Sahithi
Enter class :11
Enter Father's Name :Karthik
Enter Mother's Name :Asha
New Admission record added successfully.
```

2. Showing admission table

```
                ************************* WELCOME TO ADMISSION MANAGEMENT ******************************
                ------------------------------------------------------------------------------------------------
                ------------------------------------------------------------------------------------------------
1 : New Admission
2 : Show Admission Details
3 : Search the admission record
4 : Issue TC (Deletion of admission record)
5 : Exit
                ------------------------------------------------------------------------------------------------
Enter your choice :2
(29665, 'Praneetha', 8, 'Narayana Swamy', 'Dipika')
(29875, 'Fathima', 9, 'Afroz', 'Hazira')
(29965, 'Preethi', 9, 'Nagarjuna', 'Deepthi')
(33692, 'Utkarsh', 12, 'Tripathi', 'Uma')
(36680, 'Ashritha', 8, 'Amit', 'Harshitha')
(36692, 'Ayush Kumar', 7, 'Arvind', 'Anamika')
(36863, 'Jyothsna', 8, 'Saiket', 'Neharika')
(36951, 'Sahithi', 11, 'Karthik', 'Asha')
```

3. Searching the admission record

```
------------------------------------------------------------------------------------------
************************* WELCOME TO ADMISSION MANAGEMENT ******************************
------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
1 : New Admission
2 : Show Admission Details
3 : Search the admission record
4 : Issue TC (Deletion of admission record)
5 : Exit
------------------------------------------------------------------------------------------
Enter your choice :3
Enter Admission Number to be searched :36863
((36863, 'Jyothsna', 8, 'Saiket', 'Neharika'),)
```

4. Issue T.C (Deletion of admission record)

```
------------------------------------------------------------------------------------------
************************* WELCOME TO ADMISSION MANAGEMENT ******************************
------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
1 : New Admission
2 : Show Admission Details
3 : Search the admission record
4 : Issue TC (Deletion of admission record)
5 : Exit
------------------------------------------------------------------------------------------
Enter your choice :4
Enter Admission Number to be deleted :36951
Admission record deleted successfully.
```

5. Adding student record to student table

```
------------------------------------------------------------------------------------------
************************* WELCOME TO STUDENT MANAGEMENT ********************************
------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
1 : Add student record
2 : Show student details
3 : Search student record
4 : Delete Student record
5 : Exit
------------------------------------------------------------------------------------------
Enter your choice:1
Enter roll number :7
Enter student name :Suman
Enter subject1 :Maths
Enter subject2 :Physics
Enter subject3 :Chemistry
Record has been saved in the student table...
```

7. Showing student table

```
------------------------------------------------
Enter your choice:2
(1, 'Aakash', 'Maths', 'Physics', 'Chemistry')
(2, 'Ankul', 'Physics', 'Chemistry', 'Biology')
(3, 'Varsha', 'Physics', 'Chemistry', 'Biology')
(4, 'Varsha', 'Maths', 'Biology', 'Chemistry')
(5, 'Vidhya', 'Biology', 'Physics', 'Chemistry')
(6, 'Adi', 'Maths', 'Physics', 'Chemistry')
(7, 'Suman', 'Maths', 'Physics', 'Chemistry')
```

8. Searching the student record

```
                ------------------------------------------------------------------------------
                ************************* WELCOME TO STUDENT MANAGEMENT ***************
                ------------------------------------------------------------------------------
                ------------------------------------------------------------------------------
1 : Add student record
2 : Show student details
3 : Search student record
4 : Delete Student record
5 : Exit
                ------------------------------------------------------------------------------
Enter your choice:3
Enter Roll Number :5
((5, 'Vidhya', 'Biology', 'Physics', 'Chemistry'),)
```

9. Deleting the student record

```
                ************************* WELCOME TO STUDENT MANAGEMENT ***********
                ------------------------------------------------------------------------------
                ------------------------------------------------------------------------------
1 : Add student record
2 : Show student details
3 : Search student record
4 : Delete Student record
5 : Exit
                ------------------------------------------------------------------------------
Enter your choice:4
Enter Roll Number :7
Student record deleted successfully...
```

10. Adding teacher record to teacher table

```
                ------------------------------------------------------------------------------
                ************************ WELCOME TO TEACHER MANAGEMENT ***********************
                ------------------------------------------------------------------------------
                ------------------------------------------------------------------------------
1 : Add new teacher record
2 : Show teacher details
3 : Search teacher record
4 : Delete teacher record
5 : Exit
                ------------------------------------------------------------------------------
Enter your choice :1
Enter teacher Number :77963
Enter teacher Name :Tom Josina
Enter teacher's Designation :PGT Computer Science
Record has been saved in the teacher table...
```

11. Showing teacher table

```
Enter your choice :2
(75523, 'P.V. Rachel', 'PGT Physics')
(75863, 'Lalithkala', 'PGT Chemistry')
(77563, 'N. Padma Rao', 'PGT English')
(77892, 'Robinson', 'PGT Physics')
(77963, 'Tom Josina', 'PGT Computer Science')
(89635, 'Asha Kona', 'PGT Biology')
```

12. Searching the teacher record

```
------------------------------------------------------------
************************* WELCOME TO TEACHER MANAGEMENT ******
------------------------------------------------------------
------------------------------------------------------------
1 : Add new teacher record
2 : Show teacher details
3 : Search teacher record
4 : Delete teacher record
5 : Exit
------------------------------------------------------------
Enter your choice :3
Enter teacher number :77563
((77563, 'N. Padma Rao', 'PGT English'),)
```

13. Deleting the teacher record

```
************************* WELCOME TO TEACHER MANAGEMENT *****
------------------------------------------------------------
------------------------------------------------------------
1 : Add new teacher record
2 : Show teacher details
3 : Search teacher record
4 : Delete teacher record
5 : Exit
------------------------------------------------------------
Enter your choice :4
Enter teacher Number :77892
Teacher record deleted successfully...
```

14. Insert fee record to fee table for new admission

```
------------------------------------------------------------
************************* WELCOME TO FEE MANAGEMENT ************
------------------------------------------------------------
------------------------------------------------------------
1 : Insert Fees for New Admission
2 : Show Fee details
3 : Update Fees
4 : Exempt Fees
5 : Exit
Enter your choice:1
Enter Admission Number :39654
Enter Student Name :Vaishno
Enter amount of fees to be paid per quarter :1800
Record has been saved in the fees table...
```

15. Showing fee details

```
------------------------------------------------------------
************************* WELCOME TO FEE MANAGEMENT ****
------------------------------------------------------------
------------------------------------------------------------
1 : Insert Fees for New Admission
2 : Show Fee details
3 : Update Fees
4 : Exempt Fees
5 : Exit
Enter your choice:2
(25568, 'Abhijeet', 2400)
(25696, 'Arjun', 1300)
(29541, 'Anamika', 2400)
(29856, 'Pawan', 1800)
(33692, 'Bharghav', 3000)
(33698, 'Abika', 2400)
(39654, 'Vaishno', 1800)
```

16. Updating fee record

```
------------------------------------------------------------
************************* WELCOME TO FEE MANAGEMENT ******
------------------------------------------------------------
------------------------------------------------------------
1 : Insert Fees for New Admission
2 : Show Fee details
3 : Update Fees
4 : Exempt Fees
5 : Exit
Enter your choice:3
Enter Admission Number :39654
Enter amount of fees to be updated :2400
Record updated successfully
```

17. Deleting fee record

```
                ------------------------------------------------------------
                ************************** WELCOME TO FEE MANAGEMENT *****
                ------------------------------------------------------------
                ------------------------------------------------------------
1 : Insert Fees for New Admission
2 : Show Fee details
3 : Update Fees
4 : Exempt Fees
5 : Exit
Enter your choice:4
Enter Admission Number :29856
Fees record deleted successfully...
```

REQUIREMENTS

- Front End - Python 3.x
- Back End - MySQL Database (MySQL Command Line Client)
- MySQL Connector
  (Eg: pymysql, mysql.connector, etc.)

BIBILIOGRAPHY

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- python.mykvs.in
- www.python4csip.com