

A Project report

on

“ Students Data Management ”

Submitted by

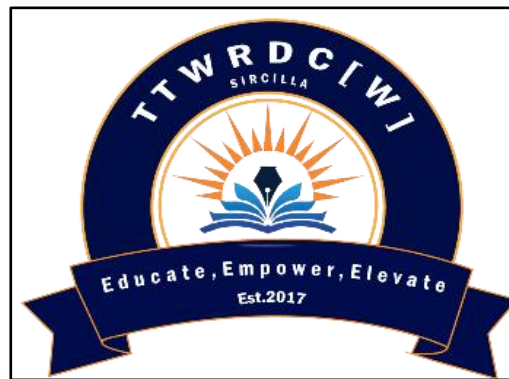
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Under the guidance

Of

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Department of Computer Science & Applications

Telangana Tribal Welfare Residential Degree

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(2021-22)

DECLARATION

I hereby, declare that this project entitled “ **STUDENTS DATA MANAGEMENT** ” have completed successfully towards the partial fulfillment for the award of the degree “ **BACHELOR OF COMPUTER SCIENCE** ” from “**TELANGANA TRIBAL WELFARE RESIDENTIAL DEGREE COLLEGE FOR WOMEN, RAJANNA SIRICILLA** .This is the bonafide work undertaken by me which is not submitted to any other university or institution for the award of any degree / diploma.

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CERTIFICATE

This is to certify that a study on project titled “ **Students Data Management** ”. This project is submitted by B. Susheela (19077104468011), Ch.Suchithra (19077104468011), M.Vaishnavi (19077104468029), G.Achala (19077104468022) and M.Anusha (19077104468026) from **Telanagana Tribal Welfare Residential Degree College for Women, Siricilla** under the guidance of L.Anusha, HOD, Department of Computer Science and Applications. This has not been submitted to any other institute or university for the award of any degree.



Signature of the guide



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**“STUDENTS
DATA
MANAGEMENT”**

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1. BRIEF REVIEW OF PROJECT

1.1. Title: STUDENTS DATA MANAGEMENT

1. 2 Introduction:

During search for a project topic, working of “STUDENTS DATA MANAGEMENT” impresses me. Use of computer is very essential and necessary in all the fields of life. Computerization of students data will obviously save the time and will offer speed to the work.

Thus it will support to our service to people, by using computerized mechanism we maintain all the information. This project is very useful in handling data as requirements in schools. This new technique will certainly introduce in various schools for maintaining the students data.

I have tried my level best to make this project more and more efficient for practical use.

2.1 CHOICE OF LANGUAGE

Python is an object oriented programming language that provides a way of modularizing programs.

Python is versatile for handling very large programs. It is suitable for virtually any programming task including database, communication system and complex real life application.

Python programs are easily maintainable and expandable when a new feature needs to be implemented. It is very easy to add to existing structure of an object. In Python we can create variables at any place of programs.

Python is a high-level, interpreted, interactive, and object-oriented scripting language. Python was designed to be highly readable which uses English keywords frequently whereas other languages use punctuation and it has fewer syntactical constructions than other languages.

It is used in :

1. Software Development
2. Web Development
3. System Scripting
4. Mathematics



That is why I have selected Python programming language for my project.

2.2 CHOICE OF DATABASE

MySQL is a free-to-use, open-source database that facilitates effective management of databases by connecting them to the software. It is a stable, reliable and powerful solution with advanced features like the following:

1. Data Security

MySQL is globally renowned for being the most secure and reliable database management system used in popular web applications like WordPress, Drupal, Joomla, Facebook and Twitter. The data security and support for transactional processing that accompany the recent version of MySQL, can greatly benefit any business especially if it is an eCommerce business that involves frequent money transfers.

2. On-Demand Scalability

MySQL offers unmatched scalability to facilitate the management of deeply embedded apps using a smaller footprint even in massive warehouses that stack terabytes of data. On-demand flexibility is the star feature of MySQL. This open source solution allows complete customization to eCommerce businesses with unique database server requirements.

3. High Performance

MySQL features a distinct storage-engine framework that facilitates system administrators to configure the MySQL database server for a flawless performance. Whether it is an eCommerce website that receives a million queries every single day or a high-speed transactional processing system, MySQL is designed to meet even the most demanding applications while ensuring optimum speed, full-text indexes and unique memory caches for enhanced performance.

4. Round-The-Clock Uptime

MySQL comes with the assurance of 24X7 uptime and offers a wide range of high availability solutions like specialized cluster servers and master/slave replication configurations.

5. Comprehensive Transactional Support

MySQL tops the list of robust transactional database engines available on the market. With features like complete atomic, consistent, isolated, durable transaction support, multi-version transaction support, and unrestricted row-level locking, it is the go-to solution for full data integrity. It guarantees instant deadlock identification through server-enforced referential integrity.

6. Complete Workflow Control

With the average download and installation time being less than 30 minutes, MySQL means usability from day one. Whether your platform is Linux, Microsoft, Macintosh or UNIX, MySQL is a comprehensive solution with self-management features that automate everything from space expansion and configuration to data design and database administration.

7. Reduced Total Cost Of Ownership

By migrating current database apps to MySQL, enterprises are enjoying significant cost savings on new projects. The dependability and ease of management that accompany MySQL save your troubleshooting time which is otherwise wasted in fixing downtime issues and performance problems.

8. The Flexibility Of Open Source

All the fears and worries that arise in an open source solution can be brought to an end with MySQL's round-the-clock support and enterprise indemnification. The secure processing and trusted software of MySQL combine to provide effective transactions for large volume projects. It makes maintenance, debugging and upgrades fast and easy while enhancing the end-user experience.

3. PRE REQUISITES

1. Python Language
2. Mysql 8
3. PIP

Mysql Details installed in computer:

host : localhost
user : root
password : abcd
database : jnv
table : student1 (with following details)

```
mysql> desc student1;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| sname | char(30)  | YES  |     | NULL    |       |
| admno | int       | NO   | PRI | NULL    |       |
| dob   | date      | YES  |     | NULL    |       |
| cls   | char(3)   | YES  |     | NULL    |       |
| cty   | char(20)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

4. SOURCE CODE

```
import mysql.connector
mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
    database="jnv",auth_plugin="mysql_native_password")
cursor=mycon.cursor()
```

def display():

```
mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
    database="jnv",auth_plugin="mysql_native_password")
cursor=mycon.cursor()
sql = "SELECT * FROM student1"
cursor.execute(sql)
results = cursor.fetchall()
for c in results:
    sname = c[0]
    admno= c[1]
    dob=c[2]
    cls=c[3]
    cty=c[4]
    print ("Student Name: ",sname," Admission No= ",admno," DOB= ",dob,
        " Class: ",cls," City: ",cty)
mycon.close()
```

def insert():

```
sname=input("Enter Student Name : ")
admno=int(input("Enter Admission No : "))
dob=input("Enter Date of Birth(yyyy-mm-dd): ")
cls=input("Enter class for admission: ")
cty=input("Enter City : ")
sql="INSERT INTO student1(sname,admno,dob,cls,cty) VALUES
    ('{}',{},{},{},{}')".format(sname,admno,dob,cls,cty)
try:
    cursor.execute(sql)
    mycon.commit()
except:
    mycon.rollback()
    mycon.close()
mycon.commit()
mycon.close()
```

def update():

```
mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
    database="jnv",auth_plugin="mysql_native_password")
cursor=mycon.cursor();
sql = "select * from student1"
cursor.execute(sql)
results = cursor.fetchall()
for c in results:
    sname = c[0]
    admno= c[1]
    dob=c[2]
    cls=c[3]
    cty=c[4]
    print("Record...",sname," ",admno," ",dob," ",cls," ",cty," ")
tempadmno=int(input("Enter Admission No : "))
tempcls=input("Enter new class : ")
sql = "Update student1 set cls='{}' where admno={}".format(tempcls,tempadmno)
cursor.execute(sql)
mycon.commit()
mycon.close()
```

def delete():

```
mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
    database="jnv",auth_plugin="mysql_native_password")
cursor=mycon.cursor();
sql = "SELECT * FROM student1"
cursor.execute(sql)
results = cursor.fetchall()
for c in results:
    sname = c[0]
    admno= c[1]
    dob=c[2]
    cls=c[3]
    cty=c[4]
    print("Record...",sname," ",admno," ",dob," ",cls," ",cty," ")
tempadm=int(input("\nEnter admission no to be deleted : "))
sql = "delete from student1 where admno={}".format(tempadm)
cursor.execute(sql)
mycon.commit()
mycon.close()
```

```
choice='Y'
while choice not in ['n','N']:
    print('WELCOME TO STUDENT MANAGEMENT SYSTEM\n')
    print('1.DISPLAY ALL STUDENT DETAILS')
    print('2.NEW ADMISSION')
    print('3.UPDATE STUDENT DETAILS')
    print('4.ISSUE TC - DELETE STUDENT DETAILS')
    c=int(input("Enter ur choice (1-4) : "))
    #print("\nInitially the details are..\n')
    if c==1:
        display()
    elif c==2:
        insert()
    elif c==3:
        update()
    elif c==4:
        delete()
    choice=input("Do you want to continue.....Y/N")
```

5. Sample Data

WELCOME TO STUDENT MANAGEMENT SYSTEM

- 1.DISPLAY ALL STUDENT DETAILS
- 2.NEW ADMISSION
- 3.UPDATE STUDENT DETAILS
- 4.ISSUE TC - DELETE STUDENT DETAILS

Enter ur choice (1-4) : **2**

Enter Student Name : G.KIRAN

Enter Admission No : 4565

Enter Date of Birth(yyyy-mm-dd): 2004-08-13

Enter class for admission: XI

Enter City : ELURU

Do you want to continue.....Y/N Y

WELCOME TO STUDENT MANAGEMENT SYSTEM

- 1.DISPLAY ALL STUDENT DETAILS
- 2.NEW ADMISSION
- 3.UPDATE STUDENT DETAILS
- 4.ISSUE TC - DELETE STUDENT DETAILS

Enter ur choice (1-4) : 2

Enter Student Name : K.ROHAN

Enter Admission No : 3454

Enter Date of Birth(yyyy-mm-dd): 2004-12-07

Enter class for admission: XI

Enter City : T P GUEDEM

Do you want to continue.....Y/N Y

WELCOME TO STUDENT MANAGEMENT SYSTEM

- 1.DISPLAY ALL STUDENT DETAILS
- 2.NEW ADMISSION
- 3.UPDATE STUDENT DETAILS
- 4.ISSUE TC - DELETE STUDENT DETAILS

Enter ur choice (1-4) :1

Student Name: K.ROHAN Admission No= 3454 DOB= 2004-12-07 Class: XI City: T P GUEDEM

Student Name: G.KIRAN Admission No= 4565 DOB= 2004-08-13 Class: XI City: ELURU

Do you want to continue.....Y/N Y

```
mysql> SELECT * FROM STUDENT1;
+-----+-----+-----+-----+-----+
| sname  | admno | dob       | cls  | cty      |
+-----+-----+-----+-----+-----+
| K.ROHAN | 3454  | 2004-12-07 | XI   | T P GUEDEM |
| G.KIRAN | 4565  | 2004-08-13 | XI   | ELURU      |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

WELCOME TO STUDENT MANAGEMENT SYSTEM

- 1.DISPLAY ALL STUDENT DETAILS
- 2.NEW ADMISSION
- 3.UPDATE STUDENT DETAILS
- 4.ISSUE TC - DELETE STUDENT DETAILS

Enter ur choice (1-3) : 1

Student Name: K.ROHAN Admission No= 3454 DOB= 2004-12-07 Class: X
City: T P GUEDEM

Student Name: G.KIRAN Admission No= 4565 DOB= 2004-08-13 Class: XI
City: ELURU

Do you want to continue.....Y/N Y

WELCOME TO STUDENT MANAGEMENT SYSTEM

- 1.DISPLAY ALL STUDENT DETAILS
- 2.NEW ADMISSION
- 3.UPDATE STUDENT DETAILS
- 4.ISSUE TC - DELETE STUDENT DETAILS

Enter ur choice (1-4) : 4

Record... K.ROHAN 3454 2004-12-07 X T P GUEDEM

Record... G.KIRAN 4565 2004-08-13 XI ELURU

Enter admission no to be deleted : 4565

Do you want to continue.....Y/N Y

WELCOME TO STUDENT MANAGEMENT SYSTEM

- 1.DISPLAY ALL STUDENT DETAILS
- 2.NEW ADMISSION
- 3.UPDATE STUDENT DETAILS
- 4.ISSUE TC - DELETE STUDENT DETAILS

Enter ur choice (1-4) : 1

Student Name: K.ROHAN Admission No= 3454 DOB= 2004-12-07 Class: X City: T P GUEDEM

Do you want to continue.....Y/N N

```
mysql> SELECT * FROM STUDENT1;
+-----+-----+-----+-----+-----+
| sname  | admno | dob       | cls  | cty      |
+-----+-----+-----+-----+-----+
| K.ROHAN | 3454  | 2004-12-07 | X    | T P GUEDEM |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```



6. USER DOCUMENTATION

REAL LIFE APPLICATIONS

This project is very easy to manage students data in schools. This project is mainly used for the purpose of educational institutes. It handles huge data very efficiently with 100% accuracy and saves time.

The main - menu is displayed on the screen. On the main menu the following options are displayed on the screen.

WELCOME TO STUDENT MANAGEMENT SYSTEM

1.DISPLAY ALL STUDENT DETAILS

2.NEW ADMISSION

3.UPDATE STUDENT DETAILS

4.ISSUE TC - DELETE STUDENT DETAILS

Enter ur choice (1-4) :

DATA IMPLEMENTATION

For this project, the sample input data is collected from the user. It is very tedious and time consuming process. Though a man has a very intelligent mind but he should not solve heavy calculations fast and accurate and he makes errors.

A school can use one computer for the implementation of the project. It processes automatically important students data without time waste and without any errors. This process gives accurate result with 100% accuracy than manual system.

7. CONCLUSION

While selecting this project, I decided to make a computerized “Students Data Management” very efficiently. To make a provision for user level program facility, to give flexibility to user and also to make my software user friendly, all the time return to the main menu, when the work in the particular sub-menu is completed! Python is an object oriented language, it gives the full facility for any future modification without any much complexity!

The concept of the Students data processing ie Storing students information like student name, admission number, class, city is common in all the schools, so this project will be applicable in each school.

This project can be extended to all other operations of the school like marks management, personal details management, etc.

8. BIBLIOGRAPHY

1. PYTHON TEXT BOOK FOR CLASS XII - SUMITA ARORA
2. Website links, which provides python, mysql.