A Project report

on

“HOSPITAL DATA MANAGEMENT ”

Submitted by

1. K.Poojitha (20077104402014)

2. P.Srija (20077104402018)

3. T.Sindhuja (20077104402022)

4. Y.Divya (20077104468027)

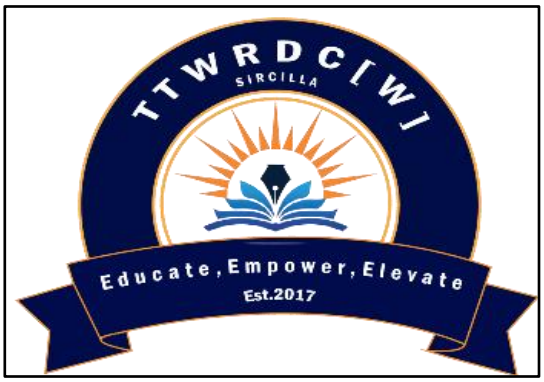
5. P.Rani (20077104468025)

Under the guidance

Of

L.Anusha, HOD

Department of Computer Science & Applications



Department of Computer Science & Applications

Telangana Tribal Welfare Residential Degree College(W), Rajanna Sircilla.

(Affiliated to Satavahana University)

(2022-23)

DECLARATION

I hereby, declare that this project entitled " **HOSPITAL DATA MANAGEMENT** " have completed successfully towards the partial fulfillment for the award of the degree "**BACHELOR OF COMPUTER SCIENCE & APPLICATIONS**" 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.

DATE :

PLACE: RAJANNA SIRICILLA

Name of the Students

1. K.Poojitha (20077104402014)
2. P.Srija (20077104402018)
3. T.Sindhuja (20077104402022)
4. Y.Divya (20077104468027)
5. P.Rani (20077104468025)

Telanagana Tribal Welfare Residential Degree College for Women, Thangallapally, Rajanna Siricilla

(Affiliated to Satavahana University)

CERTIFICATE

This is to certify that a study on project titled **" HOSPITAL DATA MANAGEMENT "**. This project is submitted by K.Poojitha (20077104402014), P.Srija (20077104402018), T.Sindhuja (20077104402022), Y.Divya (20077104468027) and P.Rani (20077104468025) 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

Principal

Principal
TTWRDC(W)SIRCILLA
Dist: Rajanna Sircilla

"HOSPITAL DATA MANAGEMENT"

(PATIENTS, DOCTORS & APPOINTMENT DETAILS)

CONTENTS

1. BRIEF REVIEW OF PROJECT

1.1. Title: HOSPITAL DATA MANAGEMENT

1. 2 Introduction:

During search for a project topic, working of "HOSPITAL DATA MANAGEMENT" impresses me. Use of computer is very essential and necessary in all the fields of life. Computerization of hospital 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 hospital data as requirements in hospitals.

This new technique will certainly introduce in various hospitals for maintaining the hospital 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.

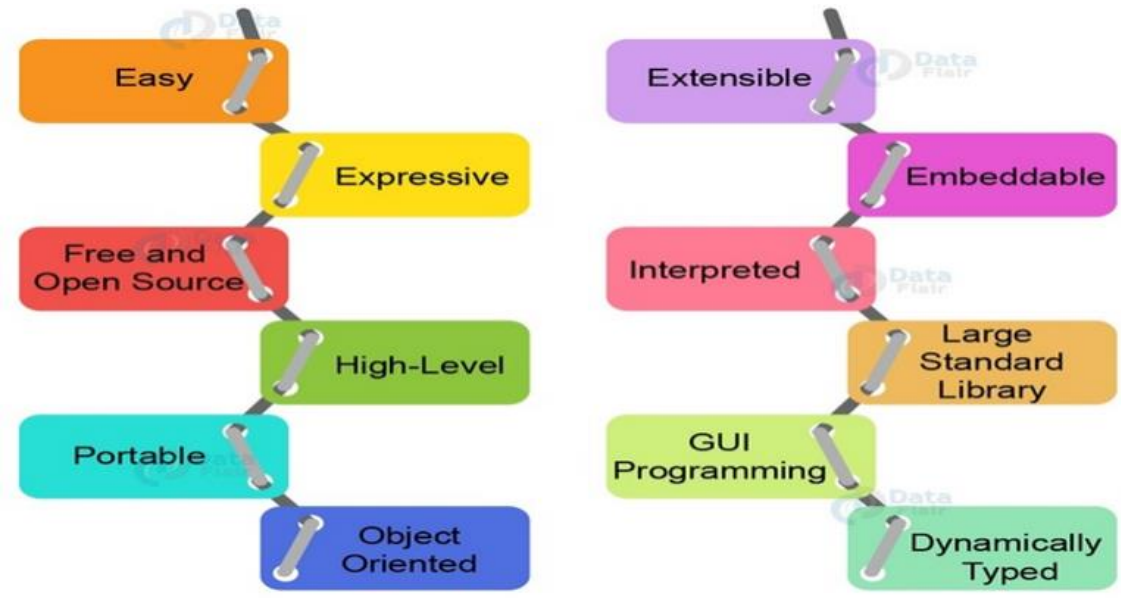
Python is versatile for handling very large programs. It is suitable for virtually any programming task including database, communication system and complex real life application.

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 My SQL'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
tables : patients, doctors, appointments(with following details)

create table patients(pid int primary key,pname char(20),pcell char(10));

```
mysql> desc patients;
+-------+----------+------+-----+---------+-------+
| Field | Type     | Null | Key | Default | Extra |
+-------+----------+------+-----+---------+-------+
| pid   | int      | NO   | PRI | NULL    |       |
| pname | char(20) | YES  |     | NULL    |       |
| pcell | char(10) | YES  |     | NULL    |       |
+-------+----------+------+-----+---------+-------+
3 rows in set (0.02 sec)
```

create table doctors(did int primary key,dname char(20),dcell char(10));

```
mysql> desc doctors;
+-------+----------+------+-----+---------+-------+
| Field | Type     | Null | Key | Default | Extra |
+-------+----------+------+-----+---------+-------+
| did   | int      | NO   | PRI | NULL    |       |
| dname | char(20) | YES  |     | NULL    |       |
| dcell | char(10) | YES  |     | NULL    |       |
+-------+----------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

create table appointments(tid int primary key,pid int,did int,fees float,Adate date);

```
mysql> desc appointments;
+-------+-------+------+-----+---------+-------+
| Field | Type  | Null | Key | Default | Extra |
+-------+-------+------+-----+---------+-------+
| tid   | int   | NO   | PRI | NULL    |       |
| pid   | int   | YES  |     | NULL    |       |
| did   | int   | YES  |     | NULL    |       |
| fees  | float | YES  |     | NULL    |       |
| Adate | date  | YES  |     | NULL    |       |
+-------+-------+------+-----+---------+-------+
5 rows in set (0.02 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 displaypatients():
   mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
        database="jnv",auth_plugin="mysql_native_password")
   cursor=mycon.cursor()
   sql = "SELECT * FROM patients"
   cursor.execute(sql)
   results = cursor.fetchall()
   for c in results:
      pid = c[0]
      pname= c[1]
      pcell=c[2]
      print ("Patient ID: ",pid," Patient Name= ",pname," Patient Cell= ",pcell)
   mycon.close()

def displaydoctors():
   mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
          database="jnv",auth_plugin="mysql_native_password")
   cursor=mycon.cursor()
   sql = "SELECT * FROM doctors"
   cursor.execute(sql)
   results = cursor.fetchall()
   for c in results:
      did = c[0]
      dname= c[1]
      dcell=c[2]
      print ("Doctor Id: ",did," Doctor Name= ",dname," Dorctor Cell= ",dcell)
   mycon.close()

def displayappointments():
   mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
          database="jnv",auth_plugin="mysql_native_password")
   cursor=mycon.cursor()
   sql = "SELECT * FROM appointments"
   cursor.execute(sql)
   results = cursor.fetchall()
   for c in results:
      tid = c[0]
      pid= c[1]
      did=c[2]
      fees=c[3]
      Adate=c[4]
      print ("Transaction ID: ",tid," Patient ID= ",pid," Doctor ID= ",did, " Fees = ",fees,
          " Appointment Date= ",Adate)
   mycon.close()
```

```
def addpatient():
    mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
            database="jnv",auth_plugin="mysql_native_password")
    cursor=mycon.cursor()
    pid=int(input("Enter Patient ID : "))
    pname=input("Enter Patient Name : ")
    pcell=input("Enter Patient Cell Number : ")
    sql="INSERT INTO patients(pid,pname,pcell) VALUES ({},'{}','{}')".format(pid,pname,pcell)
    cursor.execute(sql)
    mycon.commit()
    mycon.close()

def adddoctor():
    mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
            database="jnv",auth_plugin="mysql_native_password")
    cursor=mycon.cursor()
    did=int(input("Enter Doctor ID: "))
    dname=input("Enter Doctor Name : ")
    dcell=input("Enter Doctor Cell Number : ")
    sql="INSERT INTO doctors(did,dname,dcell) VALUES ({},'{}','{}')".format(did,dname,dcell)
    cursor.execute(sql)
    mycon.commit()
    mycon.close()

def appointments():
    mycon=mysql.connector.connect(host="localhost",user="root",password="abcd",
            database="jnv",auth_plugin="mysql_native_password")
    cursor=mycon.cursor()
    print("Previous Appointments....")
    displayappointments()
    tid=int(input("Enter New Transaction ID : "))
    pid=int(input("Enter Patient ID : "))
    did=int(input("Enter Doctor ID : "))
    fees=float(input("Enter Fees : "))
    Adate=input("Enter Appointment Date : ")
    sql="INSERT INTO appointments(tid,pid,did,fees,Adate) VALUES
                                ({},{},{},{},'{}')".format(tid,pid,did,fees,Adate)
    cursor.execute(sql)
    mycon.commit()
    mycon.close()
```

```
choice='Y'
while choice not in ['n','N']:
    print('WELCOME TO HOSPITAL MANAGEMENT SYSTEM\n')
    print('1.DISPLAY ALL PATIENTS DETAILS')
    print('2.DISPLAY ALL DOCTORS DETAILS')
    print('3.DISPLAY ALL APPOINTMENT DETAILS')
    print('4.ADD PATIENT DETAILS')
    print('5.ADD DOCTOR DETAILS')
    print('6.APPOINTMENT DETAILS')
    c=int(input("Enter ur choice (1-6) : "))
    if c==1:
        displaypatients()
    elif c==2:
        displaydoctors()
    elif c==3:
        displayappointments()
    elif c==4:
        addpatient()
    elif c==5:
        adddoctor()
    elif c==6:
        appointments()
    choice=input("Do you want to continue.....Y/N")
```

5. Sample Data

WELCOME TO HOSPITAL MANAGEMENT SYSTEM

1.DISPLAY ALL PATIENTS DETAILS
2.DISPLAY ALL DOCTORS DETAILS
3.DISPLAY ALL APPOINTMENT DETAILS
4.ADD PATIENT DETAILS
5.ADD DOCTOR DETAILS
6.APPOINTMENT DETAILS
Enter ur choice (1-6) : 4

Enter Patient ID : 2001
Enter Patient Name : K.RAJENDRA
Enter Patient Cell Number : 8734234543
Do you want to continue.....Y/N Y

WELCOME TO HOSPITAL MANAGEMENT SYSTEM

1.DISPLAY ALL PATIENTS DETAILS
2.DISPLAY ALL DOCTORS DETAILS
3.DISPLAY ALL APPOINTMENT DETAILS
4.ADD PATIENT DETAILS
5.ADD DOCTOR DETAILS
6.APPOINTMENT DETAILS
Enter ur choice (1-6) : 4

Enter Patient ID : 2002
Enter Patient Name : B.SUBBA RAO
Enter Patient Cell Number : 9876453456
Do you want to continue.....Y/N Y

WELCOME TO HOSPITAL MANAGEMENT SYSTEM

1.DISPLAY ALL PATIENTS DETAILS
2.DISPLAY ALL DOCTORS DETAILS
3.DISPLAY ALL APPOINTMENT DETAILS
4.ADD PATIENT DETAILS
5.ADD DOCTOR DETAILS
6.APPOINTMENT DETAILS
Enter ur choice (1-6) : 1

```
mysql> SELECT * FROM PATIENTS;
+------+------------+------------+
| pid  | pname      | pcell      |
+------+------------+------------+
| 2001 | K.RAJENDRA | 8734234543 |
| 2002 | B.SUBBA RAO | 9876453456 |
+------+------------+------------+
2 rows in set (0.00 sec)
```

Patient ID: 2001 Patient Name= K.RAJENDRA Patient Cell= 8734234543
Patient ID: 2002 Patient Name= B.SUBBA RAO Patient Cell= 9876453456
Do you want to continue.....Y/N Y

WELCOME TO HOSPITAL MANAGEMENT SYSTEM

1.DISPLAY ALL PATIENTS DETAILS
2.DISPLAY ALL DOCTORS DETAILS
3.DISPLAY ALL APPOINTMENT DETAILS
4.ADD PATIENT DETAILS
5.ADD DOCTOR DETAILS
6.APPOINTMENT DETAILS
Enter ur choice (1-6) : 5

Enter Doctor ID: 101
Enter Doctor Name : Dr.MUKESH
Enter Doctor Cell Number : 7773452345
Do you want to continue.....Y/N Y

WELCOME TO HOSPITAL MANAGEMENT SYSTEM

1.DISPLAY ALL PATIENTS DETAILS
2.DISPLAY ALL DOCTORS DETAILS
3.DISPLAY ALL APPOINTMENT DETAILS
4.ADD PATIENT DETAILS
5.ADD DOCTOR DETAILS
6.APPOINTMENT DETAILS
Enter ur choice (1-6) : 5

Enter Doctor ID: 102

Enter Doctor Name : Dr.SUNITHA
Enter Doctor Cell Number : 8884565768
Do you want to continue.....Y/N Y

WELCOME TO HOSPITAL MANAGEMENT SYSTEM

1.DISPLAY ALL PATIENTS DETAILS
2.DISPLAY ALL DOCTORS DETAILS
3.DISPLAY ALL APPOINTMENT DETAILS
4.ADD PATIENT DETAILS
5.ADD DOCTOR DETAILS
6.APPOINTMENT DETAILS
Enter ur choice (1-6) : 6

```
mysql> SELECT * FROM DOCTORS;
+-----+------------+------------+
| did | dname      | dcell      |
+-----+------------+------------+
| 101 | Dr.MUKESH  | 7773452345 |
| 102 | Dr.SUNITHA | 8884565768 |
+-----+------------+------------+
2 rows in set (0.00 sec)
```

Previous Appointments....
Transaction ID: 1 Patient ID= 2001 Doctor ID= 101 Fees = 500.0 Appointment Date= 2022-02-15
Enter New Transaction ID : 2
Enter Patient ID : 2002
Enter Doctor ID : 102
Enter Fees : 700
Enter Appointment Date : 2022-02-16
Do you want to continue.....Y/NY

WELCOME TO HOSPITAL MANAGEMENT SYSTEM

1.DISPLAY ALL PATIENTS DETAILS
2.DISPLAY ALL DOCTORS DETAILS
3.DISPLAY ALL APPOINTMENT DETAILS
4.ADD PATIENT DETAILS
5.ADD DOCTOR DETAILS
6.APPOINTMENT DETAILS
Enter ur choice (1-6) : 3
Transaction ID: 1 Patient ID= 2001 Doctor ID= 101 Fees = 500.0 Appointment Date= 2022-02-15
Transaction ID: 2 Patient ID= 2002 Doctor ID= 102 Fees = 700.0 Appointment Date= 2022-02-16
Do you want to continue.....Y/N N

```
mysql> SELECT * FROM APPOINTMENTS;
+-----+------+------+------+------------+
| tid | pid  | did  | fees | Adate      |
+-----+------+------+------+------------+
|   1 | 2001 |  101 |  500 | 2022-02-15 |
|   2 | 2002 |  102 |  700 | 2022-02-16 |
+-----+------+------+------+------------+
2 rows in set (0.00 sec)
```

6. USER DOCUMENTATION

REAL LIFE APPLICATIONS

This project is very easy to manage patients and doctors data in hospitals. This project is mainly used for the purpose of hospitals. It handless 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 is displayed on the screen.

WELCOME TO LIBRARY MANAGEMENT SYSTEM

1. DISPLAY ALL PATIENT DETAILS

2. DISPLAY ALL DOCTORS DETAILS

3. DISPLAY ALL APPOINTMENT DETAILS

4. ADD PATIENT DETAILS

5. ADD DOCTOR DETAILS

6. APPOINTMENT DETAILS

Enter ur choice (1-6) :

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 have a very intelligent mind but he should not solve heavy calculations fast and accurate and he makes errors.

A hospital can use one computer for the implementation of the project. It processes automatically important hospital related 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 "Hospital 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 Hospital data management ie Storing patients, doctors and appointments information using 3 tables ie patients, doctors and tables. These details is common in all hospitals, so this project will be applicable in each hospital.

This project can be extended to all other modules of Hospital like employees salary module, etc.

8. BIBLIOGRAPHY

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