

PROFESSIONAL TRAINING REPORT
at
Sathyabama Institute of Science and Technology
(Deemed to be University)

Submitted in partial fulfillment of the requirements for the award
of Bachelor of Technology Degree in Information Technology

By
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DEPARTMENT OF INFORMATION TECHNOLOGY
SCHOOL OF COMPUTING
SATHYABAMA INSTITUTE OF SCIENCE AND
TECHNOLOGY
JEPPIAAR NAGAR, RAJIV GANDHI SALAI,
CHENNAI – 600119. TAMILNADU

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SATHYABAMA

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(DEEMED TO BE UNIVERSITY)

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SCHOOL OF COMPUTING

BONAFIDE CERTIFICATE

This is to certify that this Project Report is the Bonafide work of who carried out the project entitled "STUDENT MANAGEMENT SYSTEM" under our supervision from August 2020 to November 2020.

Internal Guide

Dr.P.Jeyanthi

Head of the Department

Dr. R. Subhashini M.E., Ph.D.,

Submitted for Viva voce Examination held on _____

Internal Examiner

External Examiner

DECLARATION

I hereby declare that the Project Report entitled “**STUDENT MANAGEMENT SYSTEM**” done by me under the guidance of Dr.P.Jeyanthi, at Sathyabama Institute of Science and Technology (Deemed to be University), Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 600119 is submitted in partial fulfillment of the requirements for the award of Bachelor of Technology degree in Information Technology.

DATE: 11/10/2020

Place: Chennai

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge our sincere thanks to Board of management of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey our thanks to **Dr. T. SASIKALA M.E., Ph.D., Dean, School of Computing** and **Dr. R. SUBHASHINI M.E., Ph.D., Head of the Department, Department of Information Technology** for providing us the necessary support and details at the right time during the progressive reviews.

I would like to express our sincere and deep sense of gratitude to our Project **Dr.PJEYANTHI.**, for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express our thanks to all Teaching and Non-teaching staff members of the Department of **INFORMATION TECHNOLOGY** who were helpful in many ways for the completion of the project.

TRAINING CERTIFICATE

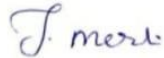
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TO WHOMSOEVER IT MAY CONCERN

This is to certify that **SHIVA M** student of **SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, BTECH/IT** has undergone the Internship Training through online in our concern entitled **PYTHON** from **12th Aug 2020** to **26th Aug 2020** in relevant departments related to their academic studies.

During the above period, the performance was good & we wish great success in all your future endeavours.


Authorised Signature

Technology drives the world. We are the people who are behind the technology.



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ABSTRACT

STUDENT MANAGEMENT SYSTEM

Student Management System is software which is helpful for authorities. In the current system All the activities are done manually. It is very time consuming and costly. Our Student Management System deals with the various activities related to managing student records. Our Objective is computerizing the process of student Records management

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Microsoft Word

PYTHON

Working Space of draw.io

Flow chat of Add Student

1. Introduction

This is the report of the coursework designed to produce a system or an application that handles Student Management System (SIS). SIS is a management information system for education establishments to manage student data. It administers user's institution smoothly. This software application has capability of this system is to add student, view all student, delete student, update info etc.

This new technology system will make users face fewer problems than the previous days. The old methods of Student Management System create more problem like damage of files, Time consuming etc. This system is user friendly and time efficient and help to avoid the unnecessary duplication of the data and make it easy to search, view and understand. The main feature of this project is that it will enable the user to understand the integrated development and learning environment and help them to use the system fullest. It will help even those people who don't understand the little about programming language.

2. Discussion and Analysis

In discussion portion of this task, a lot of researches were done in order to solve the problem and also had a brief description about python in different websites and book. The books and websites from which I have taken help are given in Bibliography section with the full detail of it. After the hard labor and regular contact with the module leaders and friend I was able to do this course work. There are some important things without which this task would not be possible to do.

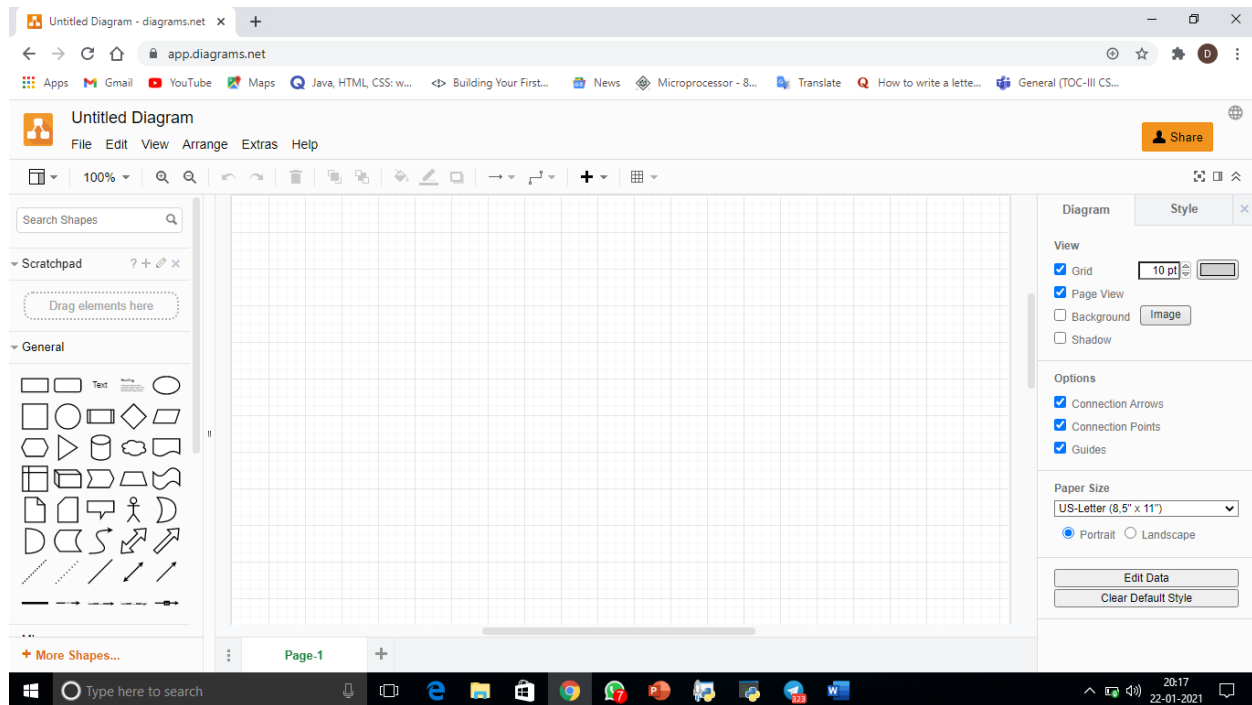


Microsoft Word

This coursework was designed with the help of different tools available throughout the researching section. To develop the documentation portion of this coursework Microsoft Word 2016 was used which was later converted into the PDF format.



Likewise, to develop the developmental portion of the coursework IDLE (Integrated Development and Learning Environment) of python 3.7.2 was used. All the codes were written and executed in the python shell window



Working Space of draw.io

Furthermore, to develop the flowcharts a free online diagram software was used called draw.io which allows us to create different shapes and organized flowchart with the appropriate diagram. Moreover, researches were done over various coursework related topics using web browser.

3. Algorithm

3.1 Stepwise algorithm

Algorithm for adding new student:

Step 1: Start

Step 2: Input the student name, roll no, branch, phone number, father name, and address in the system.

Step 3: Is the student name, roll no, branch, phone number, father name, address valid?

If yes, Then added successfully.

step 4 If no, Student name is required

Roll no is required

Branch is required

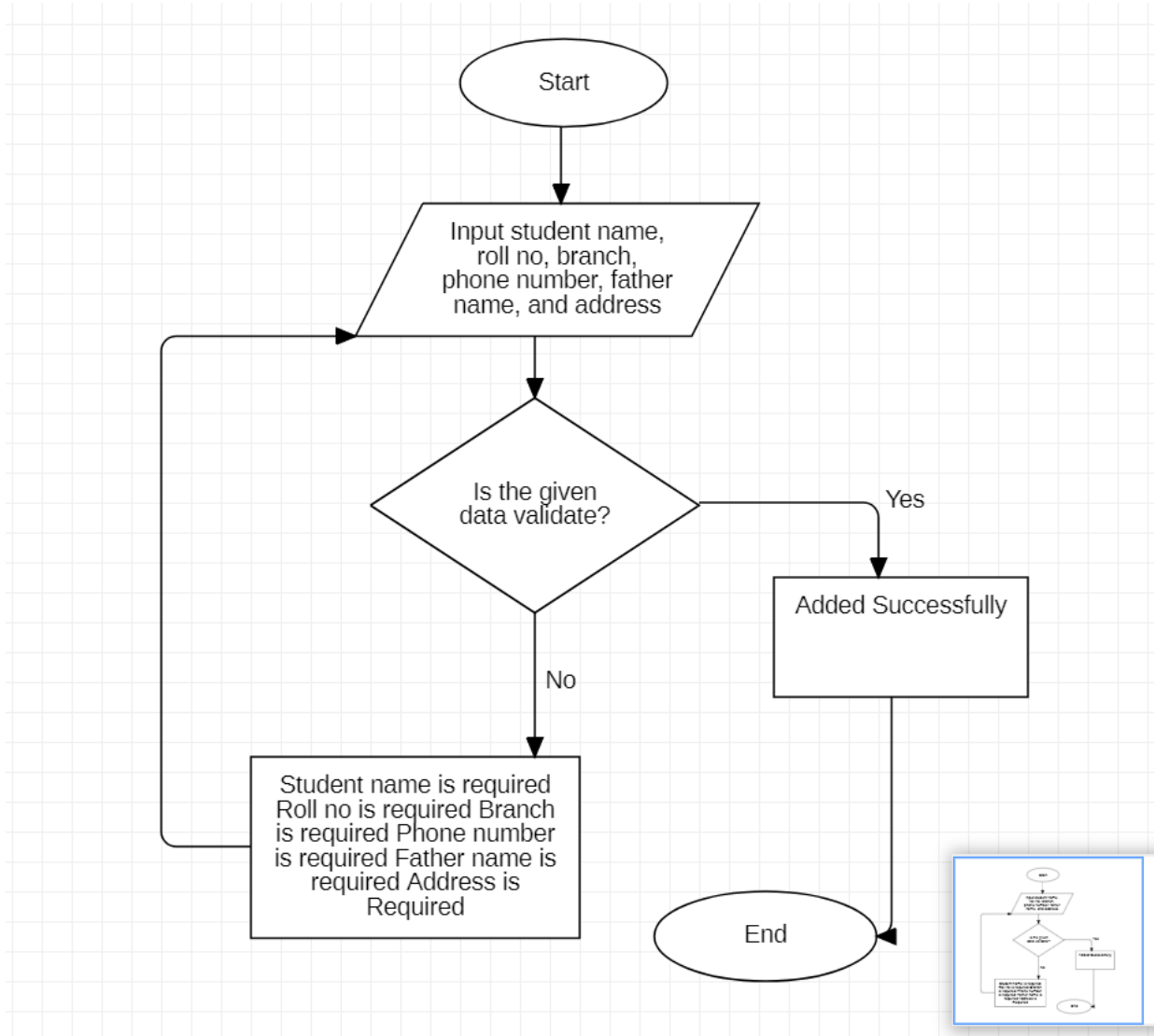
Phone number is required

Father name is required

Address is Required, then go to step 2

Step 8: End

Flow Chart



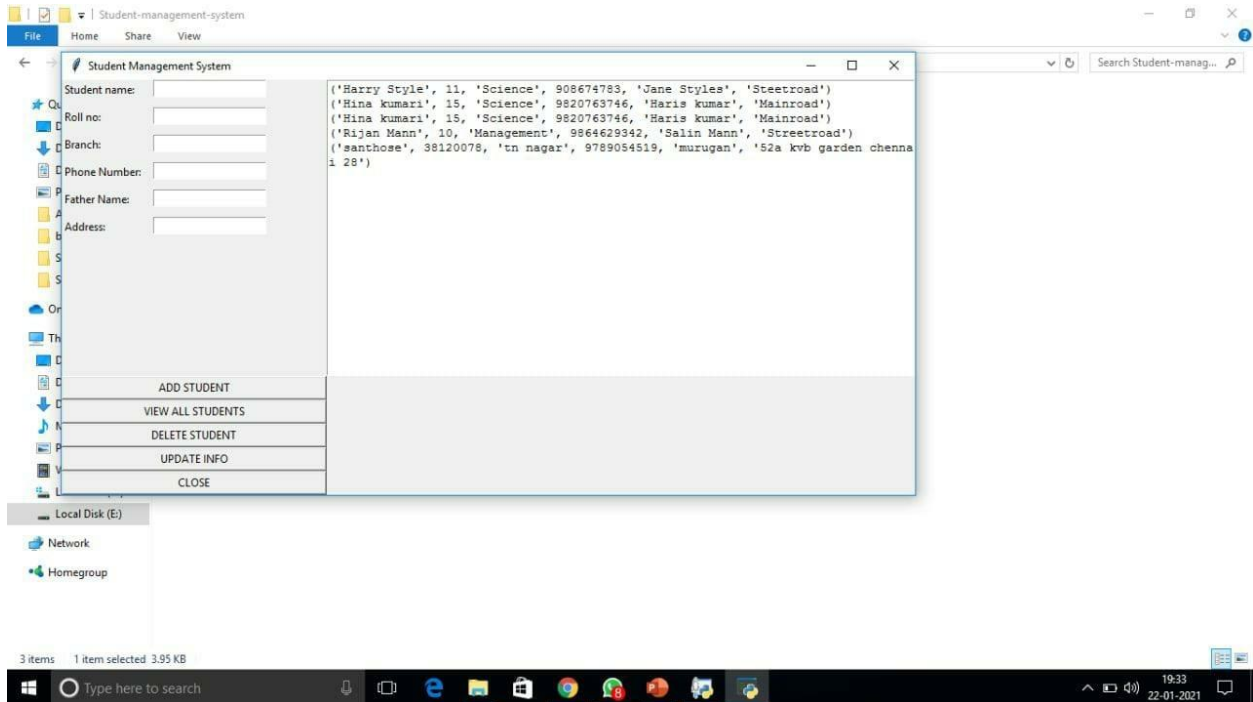
Flow chat of Add Student

4. Data Structure

To carry out different operations in Python for input/output and for data storage this project makes the maximum utilization of the collection data type list. Python also provides varieties of data types like integer, string, Boolean, float etc. Some of the data types and data structures were used while writing the program to store and manipulate the data and perform various operations on them. The data types and structures used in the program are:

1. Integer
2. String
4. Boolean

Integer data type was used in the program to store all the numerical values provided by the users as well as the results developed from the different operations. For instance, it is used to store the Roll no and Phone no. Correspondingly, string data type is used to store textual data having sequence of one or more characters. Likewise, Boolean is used to store one character (either true or false). It is used in the program to check conditions and stored in variables like loop, success.



Student Management System

Student name:

Roll no:

Branch:

Phone Number:

Father Name:

Address:

ADD STUDENT

VIEW ALL STUDENTS

DELETE STUDENT

UPDATE INFO

CLOSE

20:19 22-01-2021

Student Management System

Student name:

Roll no:

Branch:

Phone Number:

Father Name:

Address:

ADD STUDENT

VIEW ALL STUDENTS

DELETE STUDENT

UPDATE INFO

CLOSE

('Harry Style', 11, 'Science', 908674783, 'Jane Styles', 'Steetroad')
 ('Hina kumari', 15, 'Science', 9820763746, 'Haris kumar', 'Mainroad')
 ('Hina kumari', 15, 'Science', 9820763746, 'Haris kumar', 'Mainroad')
 ('Riyan Mann', 10, 'Management', 9864629342, 'Salin Mann', 'Streetroad')
 ('santhose', 38120078, 'tn nagar', 9789054519, 'murugan', '52a kvb garden chenna
 i 28')

20:30 22-01-2021

SOURCE CODE

Student_management.py

```
from tkinter import *
import sqlite3,sys

def connection():
    try:
        conn=sqlite3.connect("student.db")
    except:
        print("cannot connect to the database")
    return conn

def verifier():
    a=b=c=d=e=f=0
    if not student_name.get():
        t1.insert(END,"<>Student name is required<>\n")
        a=1
    if not roll_no.get():
        t1.insert(END,"<>Roll no is required<>\n")
        b=1
    if not branch.get():
        t1.insert(END,"<>Branch is required<>\n")
        c=1
    if not phone.get():
        t1.insert(END,"<>Phone number is required<>\n")
        d=1
    if not father.get():
        t1.insert(END,"<>Father name is required<>\n")
        e=1
    if not address.get():
        t1.insert(END,"<>Address is Required<>\n")
        f=1
    if a==1 or b==1 or c==1 or d==1 or e==1 or f==1:
        return 1
    else:
        return 0

def add_student():
    ret=verifier()
    if ret==0:
        conn=connection()
```

```

        cur=conn.cursor()
        cur.execute("CREATE TABLE IF NOT EXISTS STUDENTS(NAME
TEXT,ROLL_NO INTEGER,BRANCH TEXT,PHONE_NO INTEGER,FATHER
TEXT,ADDRESS TEXT)")
        cur.execute("insert into STUDENTS
values(?,?,?,?,?,?)",(student_name.get(),int(roll_no.get()),branch.get(),int(phone.get()),f
ather.get(),address.get()))
        conn.commit()
        conn.close()
        t1.insert(END,"ADDED SUCCESSFULLY\n")

```

```

def view_student():
    conn=connection()
    cur=conn.cursor()
    cur.execute("select * from STUDENTS")
    data=cur.fetchall()
    conn.close()
    for i in data:
        t1.insert(END,str(i)+"\n")

```

```

def delete_student():
    ret=verifier()
    if ret==0:
        conn=connection()
        cur=conn.cursor()
        cur.execute("DELETE FROM STUDENTS WHERE
ROLL_NO=?",int(roll_no.get()),)
        conn.commit()
        conn.close()
        t1.insert(END,"SUCCESSFULLY DELETED THE USER\n")

```

```

def update_student():
    ret=verifier()
    if ret==0:
        conn=connection()
        cur=conn.cursor()
        cur.execute("UPDATE STUDENTS SET
NAME=?,ROLL_NO=?,BRANCH=?,PHONE_NO=?,FATHER=?,ADDRESS=? where
ROLL_NO=?",int(roll_no.get()),branch.get(),int(phone.get()),father.
get(),address.get(),int(roll_no.get()))
        conn.commit()
        conn.close()
        t1.insert(END,"UPDATED SUCCESSFULLY\n")

```

```

def clse():
    sys.exit()

if __name__=="__main__":
    root=Tk()
    root.title("Student Management System")

    student_name=StringVar()
    roll_no=StringVar()
    branch=StringVar()
    phone=StringVar()
    father=StringVar()
    address=StringVar()

    label1=Label(root,text="Student name:")
    label1.place(x=0,y=0)

    label2=Label(root,text="Roll no:")
    label2.place(x=0,y=30)

    label3=Label(root,text="Branch:")
    label3.place(x=0,y=60)

    label4=Label(root,text="Phone Number:")
    label4.place(x=0,y=90)

    label5=Label(root,text="Father Name:")
    label5.place(x=0,y=120)

    label6=Label(root,text="Address:")
    label6.place(x=0,y=150)

    e1=Entry(root,textvariable=student_name)
    e1.place(x=100,y=0)

    e2=Entry(root,textvariable=roll_no)
    e2.place(x=100,y=30)

    e3=Entry(root,textvariable=branch)
    e3.place(x=100,y=60)

    e4=Entry(root,textvariable=phone)
    e4.place(x=100,y=90)

```

```
e5=Entry(root,textvariable=father)
e5.place(x=100,y=120)
```

```
e6=Entry(root,textvariable=address)
e6.place(x=100,y=150)
```

```
t1=Text(root,width=80,height=20)
t1.grid(row=10,column=1)
```

```
b1=Button(root,text="ADD STUDENT",command=add_student,width=40)
b1.grid(row=11,column=0)
```

```
b2=Button(root,text="VIEW ALL STUDENTS",command=view_student,width=40)
b2.grid(row=12,column=0)
```

```
b3=Button(root,text="DELETE STUDENT",command=delete_student,width=40)
b3.grid(row=13,column=0)
```

```
b4=Button(root,text="UPDATE INFO",command=update_student,width=40)
b4.grid(row=14,column=0)
```

```
b5=Button(root,text="CLOSE",command=clse,width=40)
b5.grid(row=15,column=0)
```

```
root.mainloop()
```