PYTHON MINI PROJECT

ATTENDANCE REGISTER

(GROUP 13)

AP20110010210 - MOKSHA SMRUTHI
AP20110010211 – ANNAM OMKAR
AP20110010212 – DALAZAC FAREEHA KHAN
AP20110010213 – VEMURI SATHWIKA
AP20110010708 - PUCHAKAYALA AAKASH
AP20110010709 - MOUNISH BATCHALAKURI

DESCRIPTION OF THE CODE

Develop a python project (with GUI) which, take two inputs a List of Registered roll numbers, List of presenters (with time duration of presence in class). If class scheduled hour was for 90 minutes. Compute list of absentees if a student attended time is & less than 40 minutes, consider him as absent.

ABSTRACT

E-classes and meetings are turning tables these days. Even while staying at home we can attend or do our work. Though we have technology helping us, it might be a bit difficult for the host to take attendance of participants every single day. To make it easy we can write a code in such a way that if a participant is attending the meeting for more than half of the time (say 40 min) he / she will be marked as present, else absent.

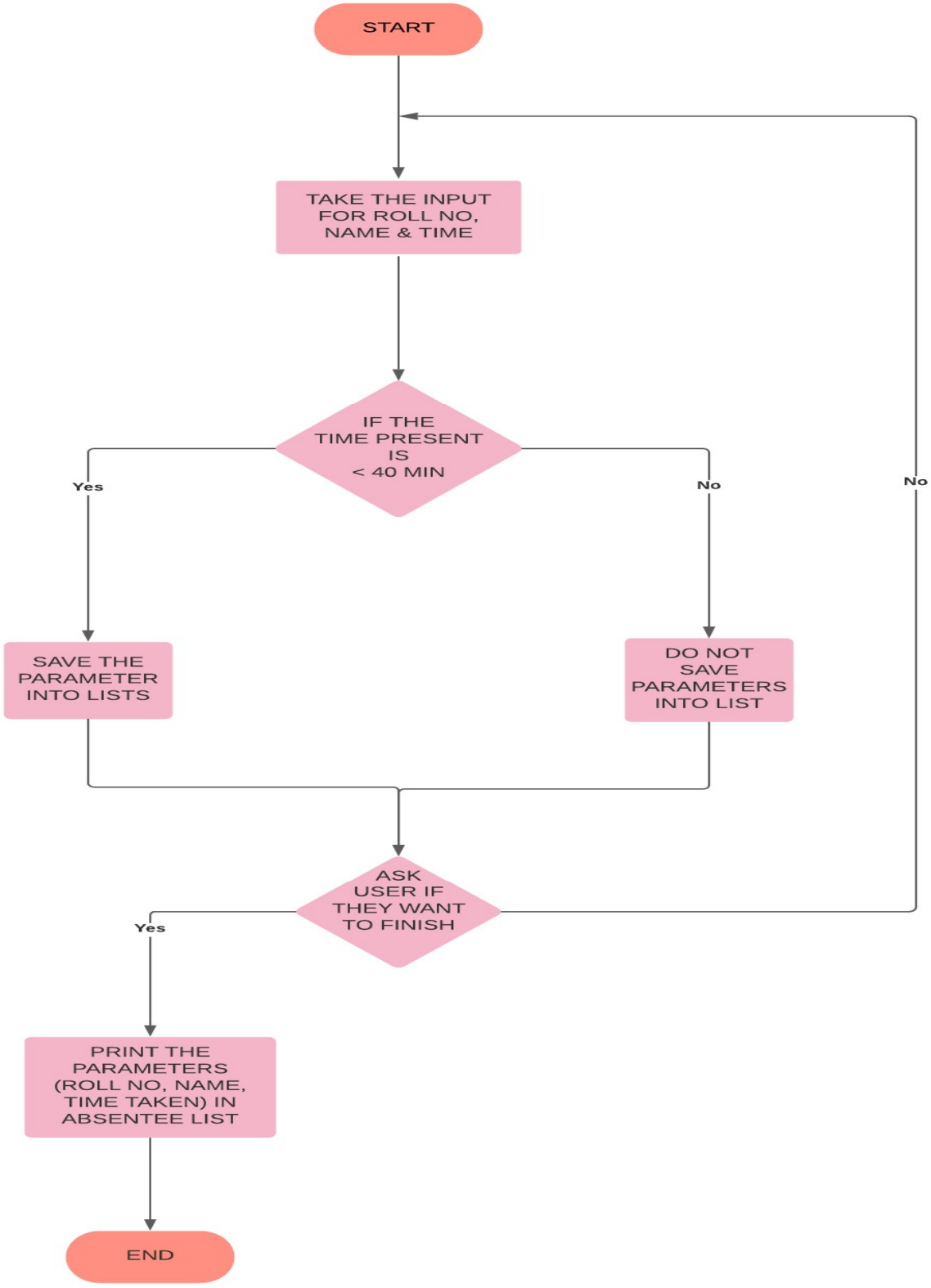
SYSTEM ARCHITECTURE

Operating System	: Windows 10
Processor	: Intel(R) Core (TM) i5-4310U CPU 2.00GHz 2.60GHz]
Installed memory (RAM)	: 16 GB
System type	: 64-bit operating system, x64-based processor
Ide	: Vs code and Pycharm

END USER OF THE PROGRAM

Schools, colleges, training institutes, etc

FLOWCHART


START
TAKE THE INPUT FOR ROLL NO, NAME & TIME
IF THE TIME PRESENT IS < 40 MIN
Yes
No
SAVE THE PARAMETER INTO LISTS
DO NOT SAVE PARAMETERS INTO LIST
ASK USER IF THEY WANT TO FINISH
No
Yes
PRINT THE PARAMETERS (ROLL NO, NAME, TIME TAKEN) IN ABSENTEE LIST
END

CODE

```
from tkinter import *
from tkinter import font


name_list = []
time_list = []
roll_list = []
def save_info():
    firstname_info = firstname.get()
    TIME_info = TIME_text.get()
    TIME_info = int(TIME_info)
    roll_info = roll_num.get()
    if TIME_info < 40:
        name_list.append(firstname_info)
        time_list.append(TIME_info)
        roll_list.append(roll_info)
        file = open("usertext.txt","a")


        file.write("student Name " + firstname_info)


        file.write("\n")
        file.write(" roll no: " + roll_info)


        file.write("\n")


        file.write(" time spent  " + str(TIME_info))
        file.write("\n")
```

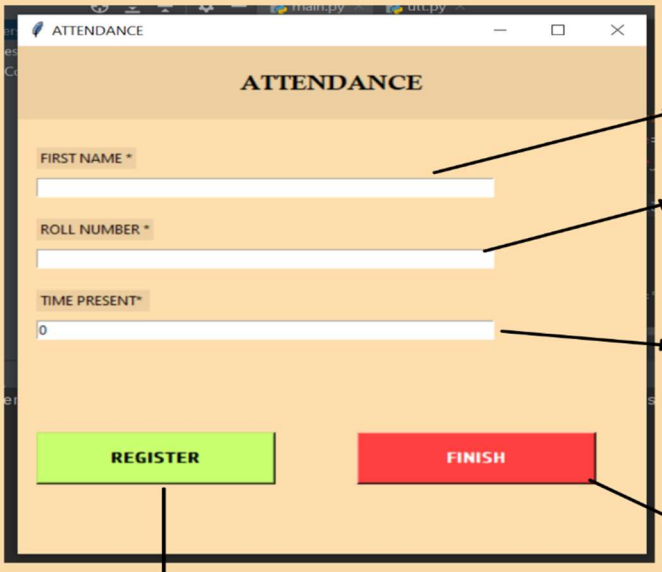
```
        file.close()

    firstname_entry.delete(0, END)
    TIME_entry.delete(0, END)
    roll_entry.delete(0, END)

screen = Tk()
screen.config(bg="navajo white")
screen.geometry("500x500")
screen.title("ATTENDANCE")
heading = Label(text="ATTENDANCE", bg="navajo white2", fg="black",
width="500",
height="3", font=("Calisto MT",15,"bold"))
heading.pack()



def print_info():
    root = Toplevel(screen)
    root.geometry("600x600")
    root.title("ABSENTEE LIST")
    root.config(bg="navajo white")
    heading_f = Label(root, text="ABSENTEE LIST", bg="navajo white2",
fg="black",
width="500", height="3", font=("Calisto MT",15,"bold"))
    heading_f.pack()
    x=[]
    Y=[]
```

```
    z=[]
    Label(root, text = "ROLL NUMBER").place(x=50, y= 80)
    Label(root, text="NAME").place(x=300, y=80)
    Label(root, text="TIME PRESENT").place(x=500, y=80)
    for item in range(len(name_list)):
        z.append(Label(root, text= roll_list[item] ))
        z[item].place(x=50, y= 110+(30*item))
        z[item].config()
        x.append(Label(root, text= name_list[item] ))
        x[item].place(x=300, y= 110+(30*item))
        Y.append(Label(root, text= str(time_list[item])))
        Y[item].place(x=500, y=110 + (30 * item))

firstname_text = Label(text="FIRST NAME *", bg="navajo white2")
roll_num = Label(text = "ROLL NUMBER *", bg="navajo white2")
TIME_text = Label(text="TIME PRESENT* ", bg="navajo white2")
firstname_text.place(x=15, y=100)
roll_num.place(x=15, y=170)
TIME_text.place(x=15, y=240)

firstname = StringVar()
TIME_text = IntVar()
roll_num = StringVar()

firstname_entry = Entry(textvariable=firstname, width="60")
TIME_entry = Entry(textvariable=TIME_text, width="60")
roll_entry = Entry(textvariable = roll_num, width = "60")
```

```
firstname_entry.place(x=15, y=130)

roll_entry.place(x=15, y=200)

TIME_entry.place(x=15, y=270)


register = Button(screen, text="REGISTER", width="20", height="2",
command=save_info, bg="DarkOliveGreen1", font=("HP Simplified Jpan", 11,
"bold"))

register.place(x=15, y=380)


finish = Button(screen, text="FINISH", width="20", height="2",
command=print_info, bg="brown1", fg="white",font=("HP Simplified Jpan", 11,
"bold"))

finish.place(x=270, y=380)

screen.mainloop()
```

UI DESIGN

MAIN SCREEN (ENTRY SCREEN)



THE FIELD FIRST NAME TAKES THE NAME OF THE STUDENT FROM THE USER. THE INPUT MUST BE A STRING

FOR EXAMPLE: NITHYA

THE FIELD FIRST ROLL NUMBER TAKES THE ROLL NUMBER OF THE STUDENT FROM THE USER. THE INPUT MUST BE A STRING i.e, IT CAN BE ALPHANUMERIC

FOR EXAMPLE: AP20110010987

THE FIELD FIRST TIME PRESENT TAKES THE TIME THAT THE STUDENT WAS PRESENT IN THE CLASS TO FACILITATE COMPUTION OF ABSENTEE LIST. THE INPUT SHOULD BE A NUMBER IN THE RANGE 0 TO 90

FOR EXAMPLE: 20

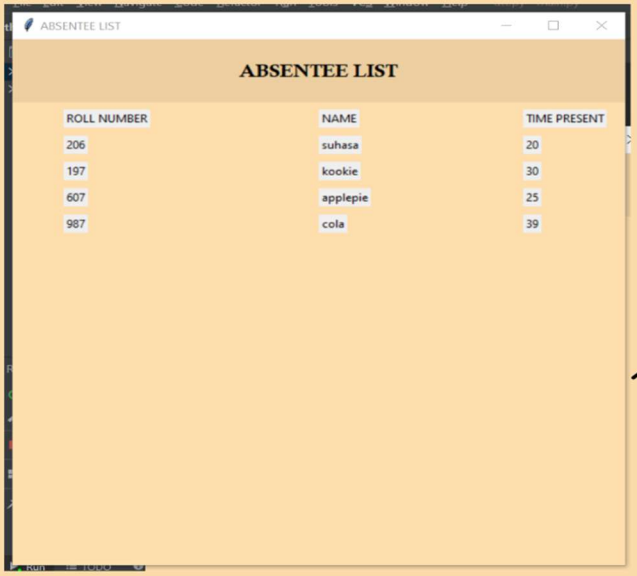
THE REGISTER BUTTON WILL STORE THE STUDENT FIELDS IN A MEMORY LOCATION FOR COMPUTING THE ABSENTEE LIST

NOTE: 1.) THE DETAILS OF A STUDENT WILL BE STORED ONLY IF THE USER CLICKS REGISTER AFTER EACH ENTRY

2.) THE USER WILL BE ABLE TO ENTER THE DETAILS OF THE NEXT STUDENT ONLY AFTER THEY CLICK REGISTER

THE FINISH BUTTON WILL DISPLAY THE ABSENTEE LIST i.e, THE LIST OF STUDENTS WHO WERE PRESENT FOR LESS THAN 40 MINUTES IN CLASS ALONG WITH THEIR NAME AND ROLL NUMBER

FINISH SCREEN (OUTPUT SCREEN)



THE FINISH SCREEN WILL PROVIDE THE USER A LIST OF ALL THE STUDENTS WHO WERE PRESENT IN THE CLASS FOR LEASS THAN 40 MINUTES AND WILL BE CONSIDERED ABSENT

INPUT & OUTPUT

1. First Name: Smruthi
   Roll number: 210

   Time present: 48

2. First Name: Omkar
   Roll number: 211

   Time present: 24

3. First Name: Fareeha
   Roll number: 212

   Time present: 47

4. First Name: Sathwika
   Roll number: 213

   Time present: 39

5. First Name: Aakash
   Roll number: 708

   Time present: 60

6. First Name: Mounish
   Roll number: 709

   Time present: 17

CONCLUSION

Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis. Python is a general purpose language, meaning it can be used to create a variety of different programs and isn't specialized for any specific problems.

For a programmer, it's important to develop a project to gain experience in any programming language whatever he or she learning. Using python, we can solve real-time problems.

To create our registration form we've used Tkinter toolkit to develop GUI applications.

Tkinter is a standard python library. It is a Graphics User Interface toolkit which is used to create a user interface Python with Tkinter module is the fastest and easiest way to develop an object-oriented GUI application. It provides us with a variety of common GUI(graphical user interface) elements that we can use to build our user interfaces like buttons, menus, and various kinds of entry fields and display areas.

In this application, User has to fill up the required information, and that information is automatically written into an excel file.Even with technology helping us, it might be a bit difficult for the host to take a note of the people present in an e-meeting and to make it easy we can write a code in such a way that if a participant is attending the meeting for more than half of the time they would be marked as present, else absent.