GUI for Speed Typing Game using Python

FIRST COUNTINOUS ASSESMENT REPORT

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

Submitted to: Bhupinder Kaur

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Objective

The primary objective of this project is to implement what we've learnt throughout our Python Programming. In this we used our skill of python programming implementing to its best to make Speed Typing Game.

Speed Typing Game here tests our ability of typing through keyboard in Fun and Learning way. Here Scoreboard is used to compete with ourselves to do better in future applying proper combination and Keystrokes.

In this Python project idea, we are going to build an exciting project through which you can check and even improve your typing speed. For a graphical user interface, we are going to use the Tkinter library which is used for working with graphics. We will draw the images and text to be displayed on the screen.

Introduction

Nowadays Computer is being daily Part of our life and typing or being fast in this time of computing era is necessity our program helps not only to make our speed better in typing but also helps us to get better at our vocabulary learning new words in fun and effective way is very important. Therefore, it becomes important to take care of our Typing Speed and for that we need to keep track of our Speed, that's where our Speed Typing Game come into play. Speed Typing Game is used to calculate the Typing level of an individual, and also provide us with Realtime Scoreboard, Accuracy, Words Per Minutes (WPM). This project is no exception, it has been coded in python and comes with a graphical user interface to facilitate the users. This project has 10 different modules which includes, Tkinter, Time, Threading, Random These four modules were already defined inbuilt by Python library. And five other modules defined by our team are First.py, Second.py, Mainfile.py, Register.py, Noofregistercandidates.py and Mysql.

This project also includes SQL database connectivity that helps the use to store their report and then fetch it later, when required. Below given is the description of each module.

• Tkinter Module

Tkinter is a Python binding to the Tk GUI toolkit. It is the standard Python interface to the Tk GUI toolkit, and is Python's de facto standard GUI. Tkinter is included with standard Linux, Microsoft Windows and Mac OS X installs of Python. The name Tkinter comes from Tk interface. Its main uses are to level and designing of Windows functioning. Displaying Text and Images with Label Widgets.

• Time Module

We are using this module in our Program to calculate the amount of time required per person for typing any particular Word or Calculating one's typing Speed. This module provides various time-related functions. For related functionality, we used here to tally users time limit of specific words how he can type faster.

• Threading Module

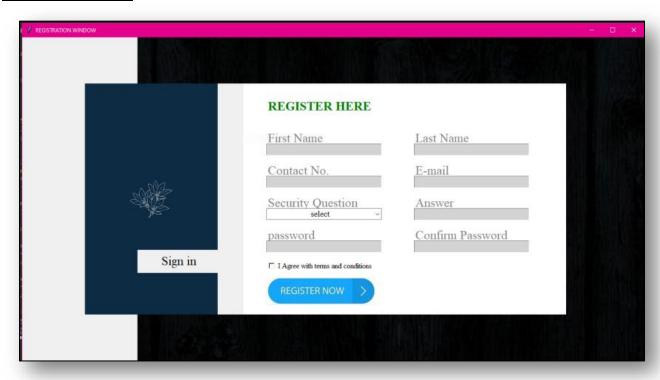
This module constructs higher-level threading interfaces on top of the lower level thread module. In Python Threading allows us to have different parts of our program run concurrently and simply our design. If you've got some experience in Python and want to speed up your Program using threads, then this is used for Separate flow of execution in our Program as while playing typing game we need to show user time taken to type words and score board who is leading in this game.

• Random Module

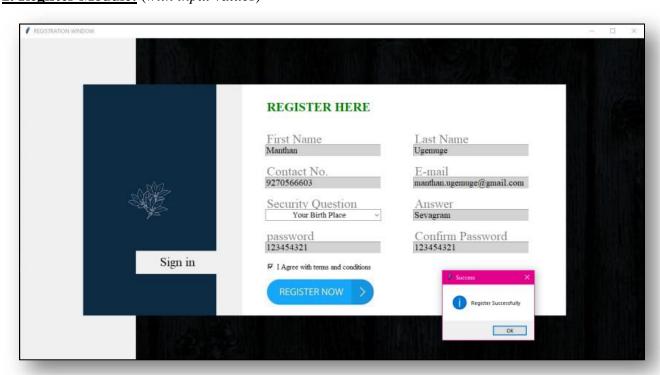
This module implements pseudo-random number generators for various distributions. For our program we used because we want user to get words randomly without any guess that he/she could be active while playing rather than playing experience gets better. For sequences, there is uniform selection of a random element, a function to generate a random permutation of a list in-place, and a function for random sampling without replacement.

GUI Screenshots:

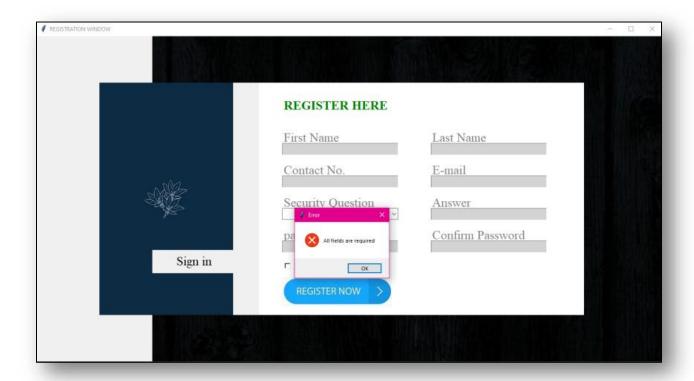
1.Register Module:



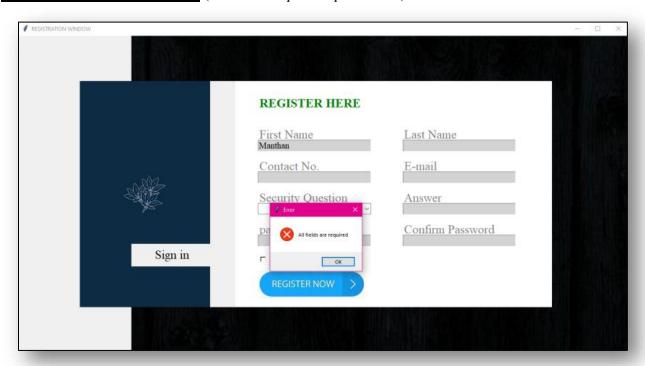
2. Register Module: (with input values)



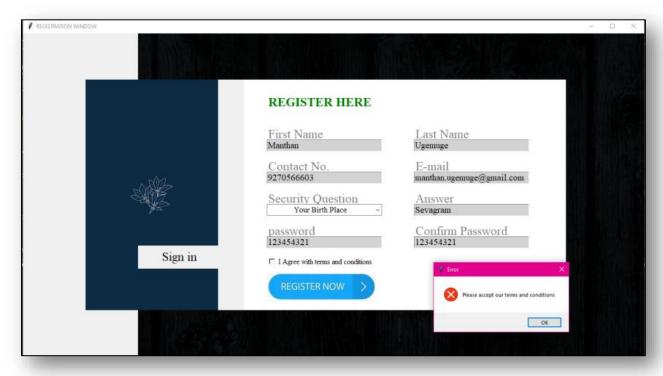
3. Register Error: (without complete input values)



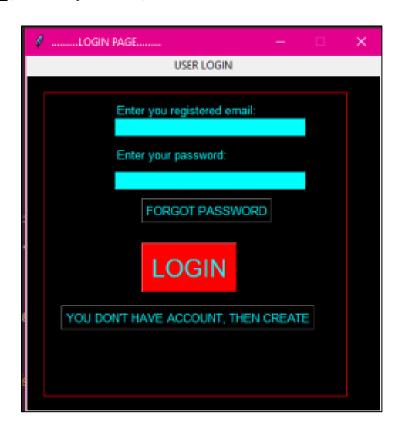
4. Register One Entry Error: (without complete input values)



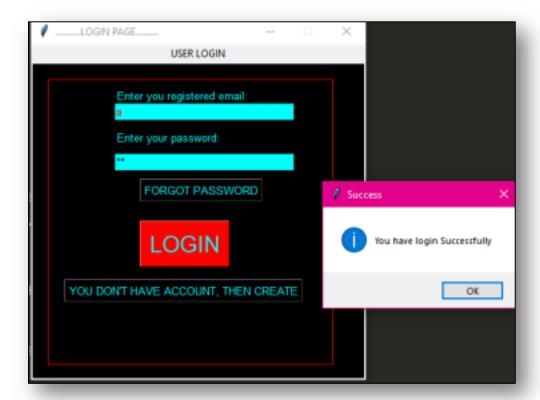
<u>5. Register Module Without Clicking Accept:</u> (without clicking "accept")



<u>6. Sign In Module: (without input values)</u>



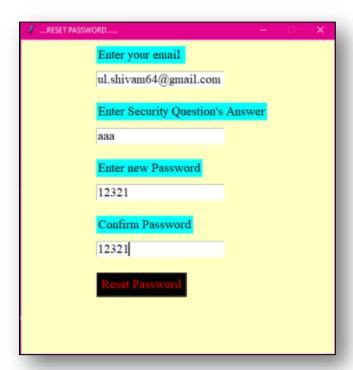
7. Login Successful: (after typing Email and Password')



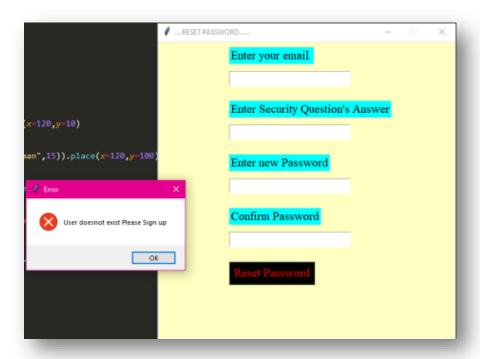
8. Login Error: (If user doesn't exist in system or password is wrong)



9. Forgot Password: (with input values)



10. Forgot Password Error: (without input values)



11. Main Game Selector Page:



12. Speed Typing Game:



13. Paragraph Typing:



14. User List: (with values)



Source Code

```
from
tkinter
import
         from PIL import Image,ImageTk
         root=Tk()
         root.geometry("400x400")
         root.resizable(0,0)
         def game():
            import first
         def para():
            import second
         root.geometry("600x600+0+0")
         root.title(".....")
         i=Image.open("C:/Users/hp/OneDrive/Desktop/code/manthan.jpg")
         p=ImageTk.PhotoImage(i)
         c=Canvas(root,height=600,width=600,bg="blue")
         c.create_image(100,100,image=p)
         Label(root,text="WELCOME TO LOVELY TYPE
         ",font=("arial",20,"italic")).place(x=100,y=10)
         Label(root,text=" WRITING GAME",font=("arial",20,"italic")).place(x=170,y=50)
         Label(root,text="DARE TO TYPE",font=("arial",15)).place(x=225,y=450)
         Button(root,text="TYPING
         GAME",command=game,cursor="hand2",bd=10).place(x=150,y=500)
         Button(root,text="PARAGRAPH
         TYPING", command=para, cursor="hand2", bd=10).place(x=300,y=500)
         c.pack()
         root.mainloop()
```

Continue: https://github.com/shivam-2002/PYTHON1

Results

We finally got the end product as a 'Speed Typing Game' that includes all the mentioned modules. We learnt how to make a GUI using Tkinter in Python and also learnt to implement database connectivity using sqlite3.

- Timer will tell us about time taken to type words
- Paragraph Typing helps us tally speed by which speed we are writing.
- Fast Interface & Sing in our Program helps user to get better at Typing.

References

- https://github.com/shivam-2002/PYTHON1
- https://docs.python.org/3/
- https://youtu.be/D31-3t-g2pA
- https://youtu.be/quSM7kHEy9k