INT213-Python Project

Story Generator

By

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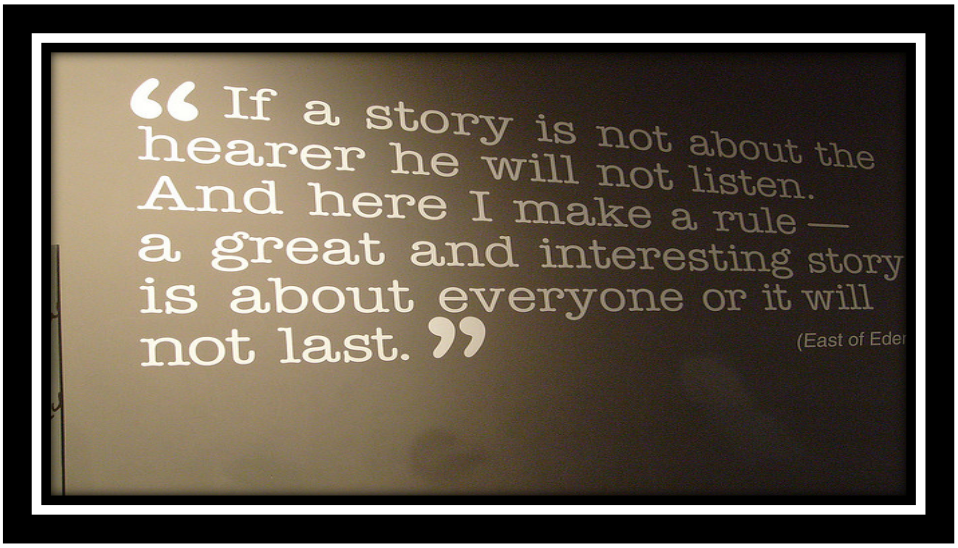

Introduction

This project is about Topic 'Story generator'. This project is done by using tkinter. There are plenty other options also available for GUI but tkinter is very beginner friendly so that has been used here.

Similar as in this project, adding images on top buttons and random text string generation is widely used in many windows applications and even in some exams

This project is done on Python 3.9 and Windows 11 using PyCharm.

In this project, 3 ways of story generation are used:-

- Any random story by selecting sentences from list, randomly and joining them.

- Story behind image, when you click given picture, a short story of given personalities will appear.

- Story where main character and his/her personality is entered by user and we click generate story a story revolving around that character will appear.

Objective:

Although this project might not have great importance from industry point of view, but if it is implemented with large no. stories, it could prove to be a useful fun activity app and could improve our English reading skills by reading something new every time it is used.

Modules used

- Tkinter is used here from creating the main GUI.
- Import random is used here to choose randomly any sentence from list.
- PhotoImage is used to place image on Button, so that it is clickable
- MessageBox is also used to get input from user.

```
import tkinter
from tkinter import *
from PIL import ImageTk, Image
from tkinter import messagebox
```

Main Page


Font
Par
Story Generator
Click the button below to generate a random story
CLICK HERE
Click image to display their story
Story based on character and quality
Enter a Character Name
Enter an Character Trait
generate

GUI

Size of GUI can be fixed by using root.geometry('size') but that's not useful in this project as many stories can be generated by multiple clicks. So auto adjustable size would work fine here.

In first part, a simple image displaying 'click here' is inserted on top of button to make it little attractive and img.subsample is used to adjust the size otherwise the image will be displayed with it's original size.

To generate a random story, different lists are made such as characters, age, story etc. then all parts are connected inside label inside a executable function.

Second part is almost similar to first. Pack(padx=10,pady=20) used to give space on sides and top, bottom. One thing to note is that images should only be png or it can be gif. JPG files doesn't work as there is image data reading issue.

In third part, input fields are used to take character name and his/her personality. And empty fields for there two are not accepted, messagbox.showwarning method is used here to display warning.

Output Display

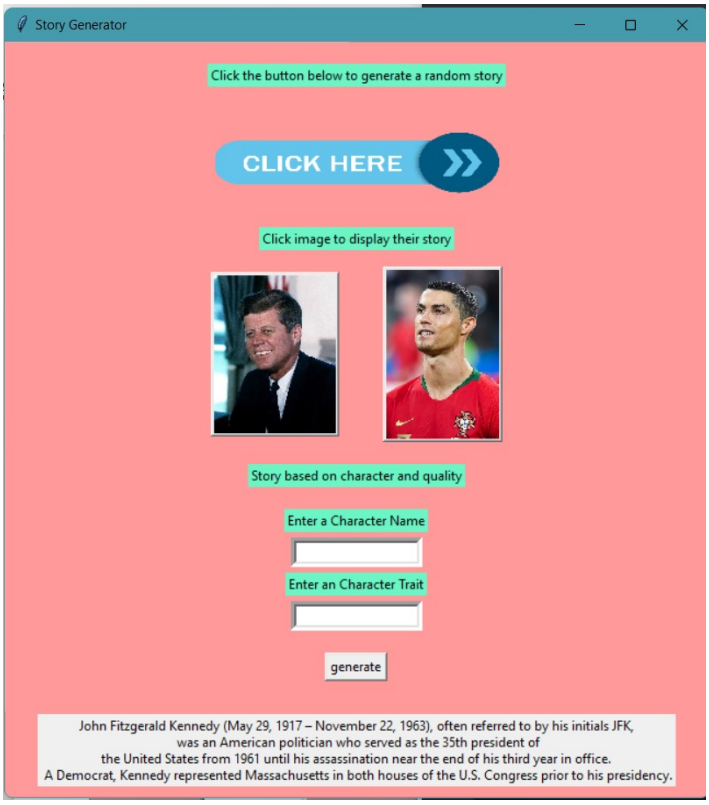

Figure 1:On clicking img in 2nd section

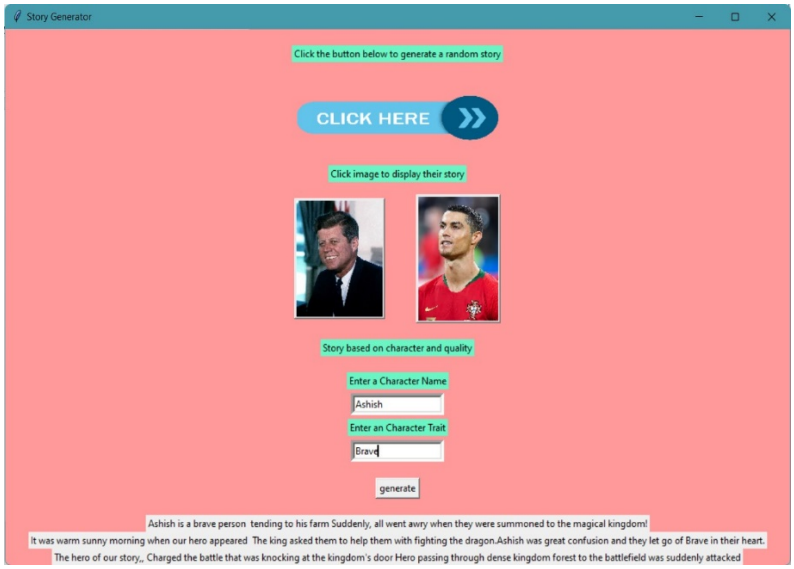

Figure 2:Output of section 3

Conclusion

Tkinter was very useful in this project as it can run on almost all platforms and very fast for smaller projects.

But many challenges also occurred like it is very difficult to make rounded corners in tkinter and setting up image background is also difficult, sometimes even text can't be displayed on top of image.

And even that difficulty is crossed, another appears like frame can be set up on background image but there is while/black colour between the buttons which looks very bad, only if there is one colour background the issue is solved, otherwise some other colour appears.

So there are many advantages of using this module. Story generator project is on the easier side that's why it worked quite good with tkinter. And the needed things for this project were easily implemented.

Acknowledgement

This project wouldn't have been possible without the help of Usha Mittal ma'am and Introduction to Python book by Y.Daniel Liang.

References :-

- Introduction to Python by Y.Daniel Liang
- docs.python.org
- GeeksForGeeks