

REPORT FOR WORD PUZZLE GAME

As a project work for Course

PYTHON PROGRAMMING (INT 213)

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Date of submission : 20th NOVEMBER 2020

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Word Puzzle Game

20th NOVEMBER 2020

ABSTRACT:-

In games such as Scrabble, Crosswords, or Words with Friends, not knowing how to correctly spell a word is the same as not knowing the word at all. Players must get to know each term in detail to be able to write it properly. Thus, these games can help to improve language skills not only by teaching new vocabulary but also by improving the players' spelling skills overall. As such, word games can serve as a training ground to practice one's concentration skills. It also enhances the cognitive skills.

ACKNOWLEDGEMENT:-

I would like to thank my mentor - Prof. Ankita wadhawan for her advice and inputs on this project. Many thanks to my friends and seniors as well, who spent countless hours to listen and provide feedbacks.

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INTRODUCTION:-

1.1 Context

This project has been done as part of my course for the CSE at Lovely Professional University. Supervised by Ankita Wadhawan, I have three months to fulfill the requirements in order to succeed the module.

1.2 Motivations

Being extremely interested in everything having a relation with the GUI the group project was a great occasion to give us the time to learn and confirm our interest for this field. GUI is an interface that allows users to interact with different electronic devices using icons and other visual indicators. This makes it easier for people with few computer skills to work with and use computer software. That's why I decided to conduct my project around the GUI.

1.3 Objective:

- The objective of the proposed project is to increase the thinking capability.
- The game having all the records which you perform in playing, you are scored whenever you give the correct assumption.
- By move horizontally, vertically, or diagonally in order to make meaningful words.
- It is manually a very difficult job to perform and its need a lot of recalling, reminding and mathematical calculation. The game of word puzzle helps to increase mental thinking, vision etc.

TEAM MEMBERS:-

TEAM LEADER: -

Pavitar Singh: -

Contributions:-

1. Coding(joined)
2. GUI
3. GitHub: - https://github.com/Pavitar01/PUZZLE_WORDS_PROJECT-.git

Abhinav Yadav: -

Contributions:-

1. Coding(joined)
2. Reports
3. GitHub:- <https://github.com/abhii9v/Puzzle-word-game/tree/main>

LIBRARIES:-

Tkinter:-

Tkinter is the most used library for developing GUI (Graphical User Interface) in Python. It is a standard Python interface to the Tk GUI toolkit shipped with Python. As Tk and Tkinter are available on most of the Unix platforms as well as on the Windows system, developing GUI applications with Tkinter becomes the fastest and easiest.

Tkinter Widgets: -

Tkinter provides various controls, such as buttons, labels and text boxes used in a GUI application. These controls are commonly called widgets.

1. Tkinter Buttons:

The Button widget is used to add buttons in a Python application. These buttons can display text or images that convey the purpose of the buttons. You can attach a function or a method to a button which is called automatically when you click the button.

2. Tkinter MessageBox:

The tkMessageBox module is used to display message boxes in your applications. This module provides several functions that you can use to display an appropriate message.

3. Tkinter LabelFrame:

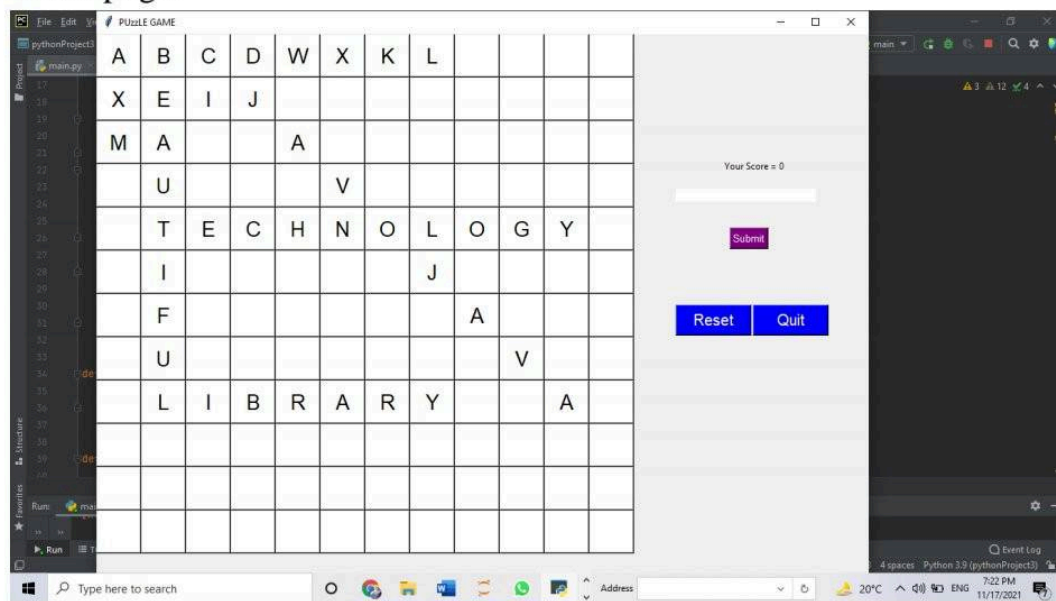
A labelframe is a simple container widget. Its primary purpose is to act as a spacer or container for complex window layouts.

NLTK:-

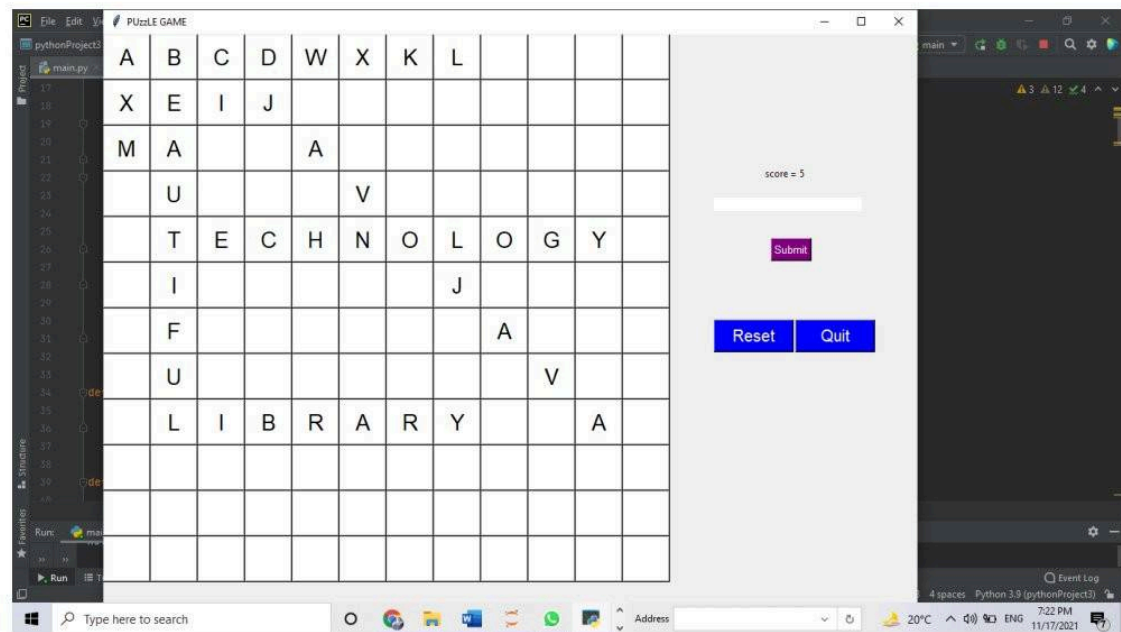
NLTK (Natural Language Toolkit) Library is a suite that contains libraries and programs for statistical language processing. It is one of the most powerful NLP libraries, which contains packages to make machines understand human language and reply to it with an appropriate response.

SCREENSHOTS:-

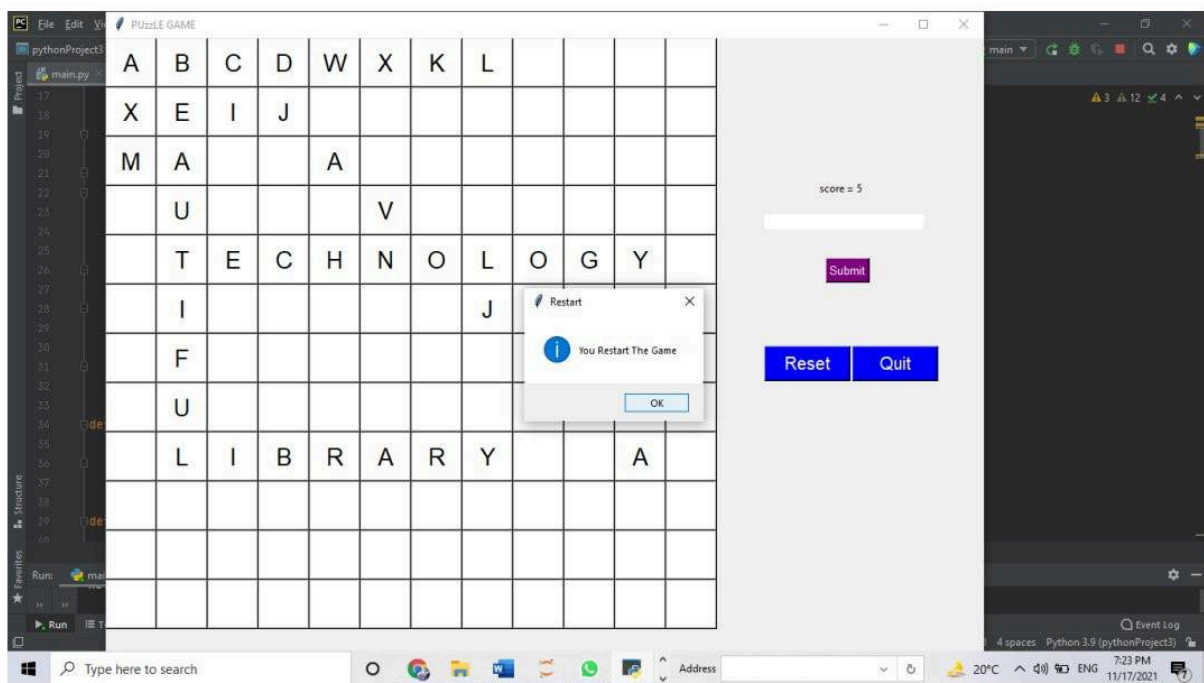
1. Main page:-



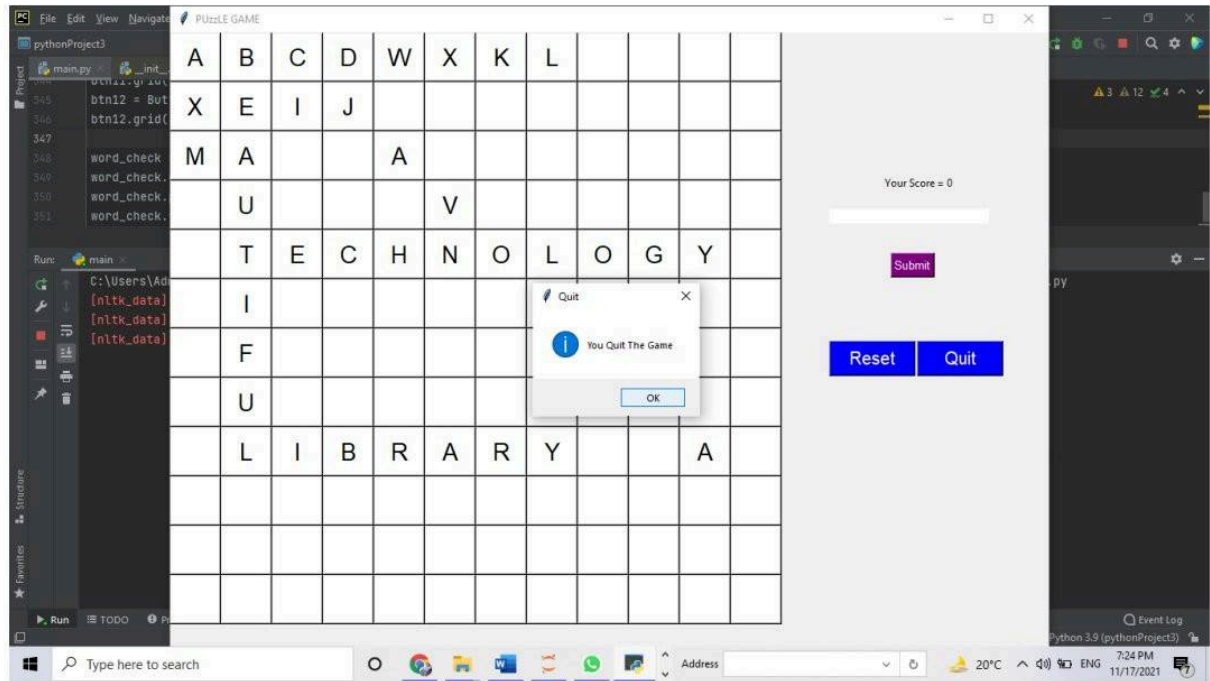
2.Score:-



3.Reset:-



3.Quit:-



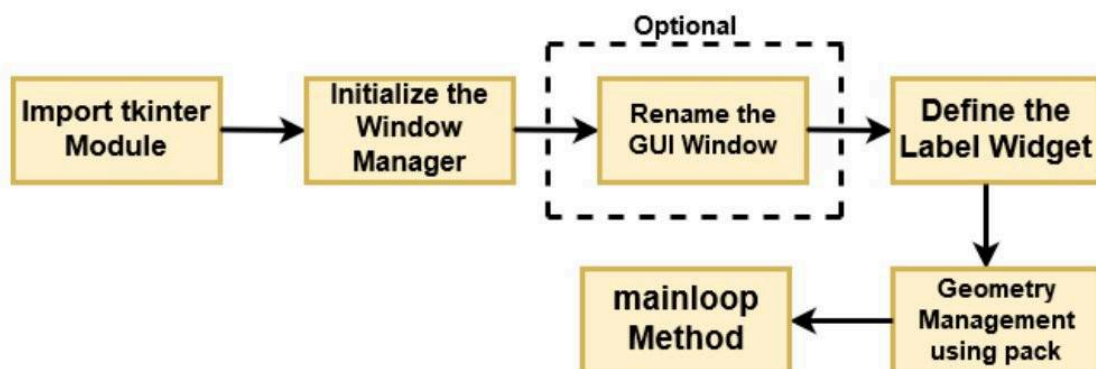
GUI(Graphical User Interface):-

GUI stands for Graphical User Interface and refers to computer programs that provide a visual means for users to interact with an underlying application or system. For example, the GUIs on our mobile phones allow us to interact with different functions through the display, which we can touch, tap, and swipe on. In this article, we're looking at exactly what Python GUI Programming is, why it is useful, and how you can get started with building one of your own!

We can do many things with Python GUI programming – but here are a few of the popular examples:

- Games,
- Mobile application,
- Human machine interface.

Flow Diagram:-



Word Puzzle Game:-

In this section, we will learn about **Puzzle Word Game using python Tkinter.**

- Python Tkinter is a module using which we can create GUI (Graphical User Interface) applications.
- Python NLTK is module which provides a practical introduction to programming for language processing. Written by the creators of NLTK.
- `Nltk.download('words')` this downloads all the possible word of the library.
- `window = Tk ()`, we have created an object of Tk class. Now we will mimic the class using window object.
- `def check_spells()` we have created this function wherein using if-else condition in this function we are using for loop to check word length and spelling of word.
- If word is wrong or length of word is less than 4 than Output is no matching with above word by the `tkinter.MessageBox`.
- Player will receive points whenever giving the correct assumption.
- `def restart ()` we have created this function wherein if user press the reset button, then the game will reset to the initial stage.
- `def Quit ()` we have created this function wherein if user press the Quit button, then the game will Quit or ended.

Conclusions:-

It is our team's hope that this document will be of huge help with understanding of our little project as we have used a different approach which has proved beneficial for us and easy for us to understand the vast ocean that is GUI.

REFERENCES:-

To conduct this project the following tools have been used:

- PyCharm and Spyder
- Tkinter (Library): <https://docs.python.org/>
- Nltk (Library): <https://www.nltk.org/>

1.1 Great learning: -

We have used this site for our basis knowledge gain of the methods that will be used in the project.

https://olympus.greatlearning.in/courses/12383/pages/functions?module_item_id=536401

1.2 Tutorials point: -

We have used this site for solving our different problems which has occurred during this project.

<https://www.tutorialspoint.com/graphical-user-interface-gui>