

Guess the Correct TV Show

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Abstract: This project is a Python based implementation of a GUI based Guess the jumbled word game using the Qt5 framework.

I. INTRODUCTION

The required program is to display a set of 10 Questions, requiring the users to guess the correct names, given the same name, in its jumbled form. The program should also choose different 10 names to be jumbled, at random from a given dataset of words.

The program will also feature a scoring system, awarding players with a point for each correct guess and display the same on evaluation.

II. METHODOLOGY

Working

Initialize

The Python Application, will have a list of 30+ names of TV shows that needs to be displayed, stored in its database, in its proper unjumbled form. During run-time, 10 Shows from the database, will be chosen on random (This is done by shuffling the list, and picking the first 10 TV Shows) to be used for the Questionnaire.

The chosen Shows are then jumbled, in such a way that each word in the name, is jumbled individually and not all together, to aid the player in identifying the TV Show.

These jumbled TV Show's names are then set in the UI to initialize the game.

Evaluation

When the player has completed guessing, he may wish to evaluate his answers. On him initiating the evaluation process by clicking the 'Evaluate' button, the text entered by the player for each question, ranging from 1 to 10 are fetched and compared with the first 10 elements of the TV Show names database.

For each correct answer, the player is awarded 1 point. Finally, after evaluation of all questions, the players score for this instance of the game is updated and displayed.

Reset

When the player wishes to retry the game for the same set of questions, he may select the reset button, which clears all the answer fields. This can be used to give 2 competing players the same set of questions to get comparable scores,

Restart

When a player wishes to try out a different set of questions, he may do so by clicking the restart button. This action, reinitializes the program, casing a different set of question to appear.

Block Execution Diagram

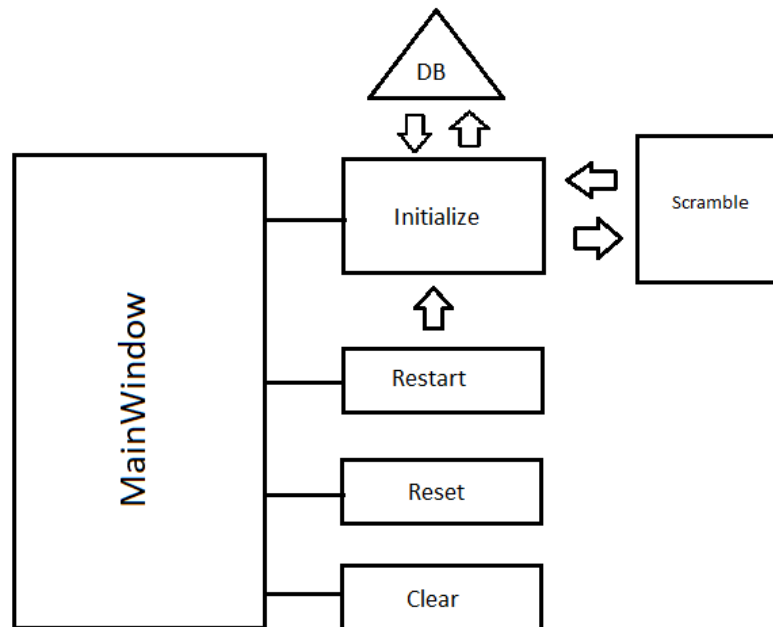


Figure 1 Block Diagram

Dependencies

- Qt5 Framework
- Python 3.7+
 - PyQt5 Wrapper
 - PyQt Tools (For designer used to create UI) [Optional]

III. RESULTS AND CONCLUSION

The UI for the Application was designed using Qt5 Designer, and was designed in such a way to give the player visual indications on whether the answer entered was correct or wrong. The factors considered during the course of designing the UI were:

- Ease of Use
- Simplicity
- Visual indications and Cues
- Minimal Objects

The main issue that the application had to deal with was dealing with how to give visual cues to the player about his scores and answers. These were on due course solved by introducing checkmark objects on every question to indicate if an answer was correct or wrong. The scores were cumbersome if implemented via Dialog boxes, thus were turned into an UI element to show the score at all times, to keep the game minimal without many pop-ups and interruption.

Final View of Application:

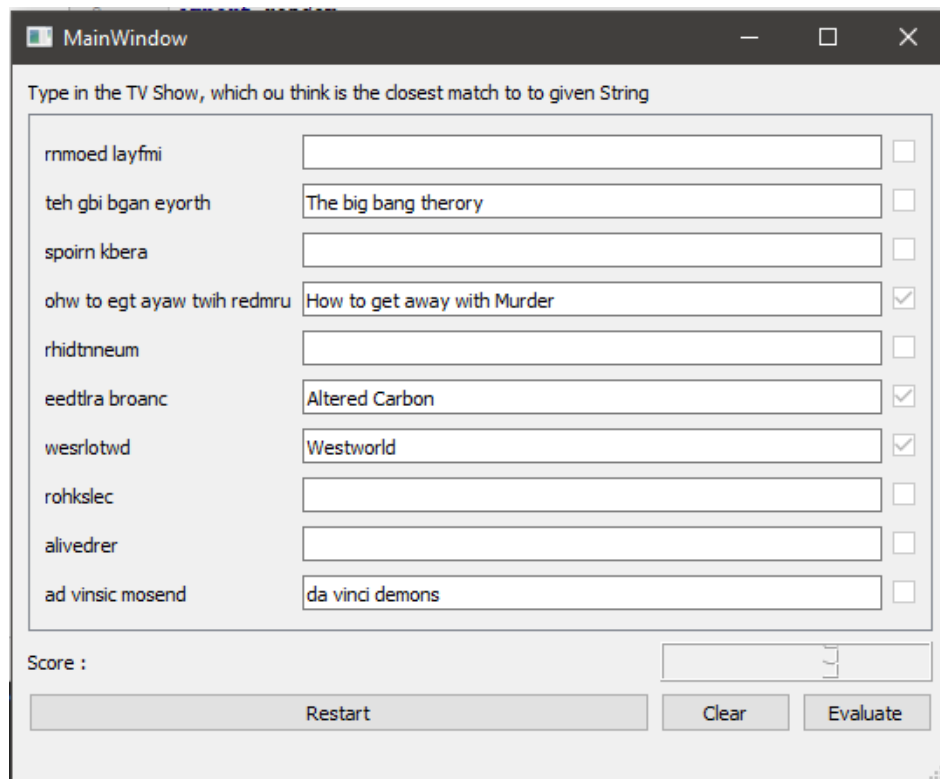


Figure 2 MainWindow of Game

Project Source available on : https://github.com/L4TTiCe/Guess_Jumbled_PyQt5

REFERENCES

1. Qt5 Documentation
<https://doc.qt.io/qt-5/>
2. Scramble Words Algorithm:
<https://gist.github.com/dbspringer/1268192/2c334f48e40a8c57acc34e399820980445efbb0c>