

YZV 102E/104E
Introduction to Programming for Data Science
Term Project

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06 10, 2022

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Summary

The report gives an idea about how the game is coded and the basis is created. Also, it shows important qualities which distinguish it from other quizzes of the game. The game is a quiz game based on Information Technologies, and users are testing their own knowledge on the subject. By using jokers, users feel more comfortable and with a wide range of options, the user can be motivated to play it. When the users want to improve themselves, they can look at the score on statics easily.

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1 Introduction

The subject of this report is the game named QUIZIT. The game is a user-based quiz which python console game that aims the user to learn while the user enjoys. QUIZIT is for information technology enthusiasts, at the same time its name inspires by the abbreviation of Information Technologies as Quiz - It. In the game, there are 3 categories, which have 12 questions and 1 extra question for each one, for which users can select and game. The user can have up to 3 wild cards during the game. These are half-and-half joker, answer twice joker and change question joker. The user should give as many correct answers as possible, and use the time very well, because a score is calculated for each quiz. As a result, an environment that can encourage players is created. Additionally, users can find some statics about their own previous games. This report includes some technique bases and complications about the game.

This report aims to give the reader a better understanding of the technical fundamentals of the game. The reader will be able to find explanations about data system, analyzes and playing the quiz.

2 Discussion

This game has certain technical requirements for the user to play efficiently. These will be explained in 5 sections; Data System of Questions, Answer System, Jokers, Data System of Users and Analyzes & Graphs.

2.1 Data System of Questions

There is a csv file as data of questions which is used in the quiz game prepared by producer of the game. in there, data is written depends on the features of columns. Firs column is type of game (components, number_systems and software), second column is the question, next four column is option contents, and last column is true answer option. For each type of quiz, there are 13 questions, because twelve of them is standard questions, and last one of them is for change question joker. No questions are used except this csv file. The requirement to write the questions one by one in a csv file is a difficult detail when the owner wants to enrich the game. A more effective way could have been chosen.

2.2 Answer System

After the user selects one category to game the quiz, questions are shown to the user as the user answer the question. The user should find the true answer and write to space. Also, the user can write /joker to use one of the jokers and /quit to quit the game there. The system takes the answer as input. And, if the question is not /quit or /joker, the system considers the input as the answer of the question. If the answer is true, the game adds to the answer list as true, and gives a celebration reaction, which is different at the time that the user does a combo, but if it is not true, the game gives a negative reaction and adds the answer list as wrong. Furthermore, at the end of each question, the time used during the question is shown.

2.3 Jokers

During this game, three jokers can be used, but at the beginning of the quizzes, users have only two jokers which are half-and-half jokers and answer twice joker. Half-and-half joker is a feature that system eliminates two options that are wrong. After elimination, a new version of it is shown, and an answer is taken as input from the user. Answer twice joker is a feature in which the user has two rights to find true answer thanks to asking the answer twice if the first one is wrong. When you answer the third question, if all of the first three questions are true, the user has one more joker named change question. The joker is a feature that the user can change the question with an extra one, but can not know whether the question is easier or not. The extra question is the thirteenth question of each type in data of question. If the user writes/joker space of answer, the system show jokers the user can use, and the user writes abbreviation of the joker the user wants to use.

2.4 Data System of Users

All data of the users is stored in two CSV files belonging to the users. To write data to these files, the system opens if there are these files, and creates these files if there are not these files. One of the two is a CSV file named usernametotal which is data on the answers given to each question is written, and the data is written after each question. The other one is a CSV file which is data about each quiz that the user played. The content of data is the type of quizzes, numbers of true, numbers of wrong, timings that were spent during the game and

scores, and the data is written after each quiz. The data is used on analyzes.

2.5 Analyzes & Graphs

There are three type of analyzes. The first one is General Score Graph that shows average scores for each type of quizzes at the same time so that users can look at which the user is more successful. For this graph, the system takes data from csv file named usernametotal, and calculates averages. By using plotext, shows the graph. The second statics is Score Graph For Each Quiz that shows the last three score and the highest score in total for each quiz. For this, the system uses data from csv file named usernametotal, and uses plotext for these graphics, too. The last statics is about top data. It shows the highest score, the highest number of true and the best timing. At the same time, it shows other data in game, in which the top data is.

3 Conclusions

The reader can understand what the aim of the game is, and which features producer want to be used by users. The game aims that users can improve themselves while enjoying. The joker and score features prevent this from being a boring quiz. Also, graphics and statics provide the users to trace their development. Thus, it encourages learning. The other qualities of the game is can be developed in later times.