**Quiz Me!**

**Midterm Project 1**

**Lab Section: 01**

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**Problem**

In this project, our task was to create a program that leads a user to take a random quiz containing three different questions. The user is asked to enter his/her lucky number from 1 to 9, which will randomly choose one quiz. There are three quizzes in total and the same quiz must be taken until the user obtains a full score on an attempt. The user can choose to take another quiz or quit after successfully completing one quiz, and scores must be averaged over all attempts.

**Analysis / Design**

Assigning random quizzes based on the user’s input and inserting and designing the quiz within the program was not a problem at all. There were two main things that we had to focus on.

The first one we struggled with was about assigning the user the same quiz after the user completed one quiz and decided to take another quiz. So, we used the user’s first lucky number as the seed to create one random number and find the remainder when that random number is divided by 10. If the remainder is from 1 to 3, Quiz 1 is assigned, if it’s from 4 to 6, Quiz 2 is assigned, and if it’s from 7 to 9, Quiz 3 is assigned. However, it does not make sense for the user to take the same quiz again. In order to solve this problem, we used the **‘True/False’** function. For example, the variable ‘taken1’ is false at the beginning of the program. But if it’s true, then the program skips Quiz1. However, as it’s the false first time, Quiz 1 proceeds, and the variable ‘taken1’ becomes true. Therefore, when the user decides to take another quiz and type the random number again, even though the remainder is from 1 to 3, as the variable ‘taken1’ is true now, the program skips Quiz 1 and moves on to the next quiz. It works the same for the other two quizzes. Screenshots of these works are shown in Screenshot (1) and (2).

**Testing / Comments**

This midterm project was our first time to create the program from nothing. Some problems we encountered during the project needed some time to think and solve but when we eventually solved them and finally saw our program working without any errors and successfully, the sense of accomplishment came so huge to us this time.

Whenever we got a nonsense number as the average score while testing the program, we had to look at every single part of the code once again to find and make sure what part is causing this logical error, which was extremely tough. There were lots of requirements in this project and hundreds of testing were done in order to achieve those requirements without any errors.

When we first got the project, it felt like we do it because we must do it. But later on, as we put the questions made by ourselves based on what we’ve learned into our program, this project came to us more meaningful and more exciting, and this is why we were able to successfully complete the project.

**Screenshots**

(1)

Text

Description automatically generated

(2)

Text

Description automatically generated