Chapter 10 Trivia Quiz

Brian Veitch

Instructions:

In this programming exercise, you will create a simple trivia game for two players. The program will work like this:

* Starting with player 1, each player gets a turn at answering 5 trivia questions. (There should be a total of 10 questions.) When a question is displayed, 4 possible answers are also displayed. Only one of the answers is correct, and if the player selects the correct answer, he or she earns a point.
* After answers have been selected for all the questions, the program displays the number of points earned by each player and declares the player with the highest number of points the winner.

To create this program, write a Question class to hold the data for the trivia question. The question class should have attributes for the following data:

* + A trivia question
  + Possible answer 1
  + Possible answer 2
  + Possible answer 3
  + Possible answer 4
  + The number of the correct answer (1, 2, 3, or 4)

The Question class should also have an appropriate \_\_init\_\_ method, accessors, and mutators.

The program should have a list or a dictionary containing 10 Question Objects, one for each trivia question. Make up your own trivia question on the subject or subjects of your choice for the objects.

Class:

|  |
| --- |
| Question |
| - question: String  - answer1: String  - answer2: String  - answer3: String  - answer4: String  - correct: Int |
| + isCorrect(answer) -> Bool  + getQuestion() -> String  + getAnswer1() -> String  + getAnswer2() -> String  + getAnswer3() -> String  + getAnswer4() -> String  + displayQuestion() – prints question and answers for user |

Data:

Variables / User input

- questions: Dictionary of class Question

- players\_score: array containing player 1 and 2’s score

- answer: int, user’s choice for answer

- current\_player: Int

Processing:

1. Create a dictionary full of questions.
2. Each question is of class Question, containing a question, 4 possible answers, and the correct answer.
3. Initialize player’s scores to 0
4. Set current\_player = 0 (1st player)
5. Tell user whose turn it is
6. Loop through the dictionary of questions and display to user
   * If user gets it right, increment their score by 1
   * If user gets it wrong, do nothing
   * Change current\_player
7. Display player scores and who won

Output:

* Display current player’s turn
* Display the question and 4 possible answers
* Display player 1 and 2’s final score
* Display who won, or if they tied.