Quiz-Maker Utilization Guide

1. Upon reaching homepage select "Let's Get Started!"
2. This will lead to the "Functionality Selection" page wherein the user may select either "Make Quiz" or "Take Quiz"
3. Make Quiz
   a. Upon selecting "Make Quiz" the user will be prompted to enter a "Quiz Title" and "Quiz Description".
   b. The user will also have the ability to select "Add New Question" and "Add New Quiz Result".
      i. The questions created by "Add New Question" will lead the person taking a quiz to be provided with a particular character result,
      ii. The results created by "Add New Quiz Result" are all the various potential characters a quiz-taker will be shown upon reaching the end of the quiz.
   c. Upon selecting "Add New Question" a set of text fields for "Question Title" and "Question Text" will appear.
      i. The user will also be a able to click a button titled "Add Answer" in order to create answer fields. Each question can have multiple answers for the purposes of multiple choice. An answer consists of two parts, listed as follows:
         1. The first part is a text field which contains the entry that will be displayed to the test taker.
         2. The second part is a list of integers that are tied to attributes, where the sum of each answer's attributes will be used to calculate the "character result" displayed to the quiz taker upon quiz completion.
            a. An example answer to the question "You're eating a sandwich and your friend is starving. What do you do?" might be "Give your friend half the sandwich". The attribute changes applied to this answer might be "Helpfulness = +3;Selfishness = -3". Each modifier is separated by a semicolon, with no spaces permitted.
      ii. The user can continue to add questions until they are satisfied that they have added enough relevant question/answer sets.
   d. Upon selecting "Add New Quiz Result", the user will be prompted to enter a "Character Title", "Character Description", and "Character Attributes".
      i. Character attributes follow the same attribute/integer pair method that "Question Answers" do.
         1. An example character could be "True Samaritan" where the attributes of that character are "Helpfulness = 10;Selfishness = -10".
         2. In order for the quiz to provide a character in response to the answers provided, the attribute modifiers are totaled and then compared to potential characters. Whichever character has the

smallest difference from the attribute sum determined by the quiz is displayed to the user as "their" character.

   3. An example quiz might be as follows:
      a. The user has answered all three questions of a quiz and is now waiting on a "character result". The attribute modifiers for the answer given to each question are as follows.
         i. Q1: "Helpfulness = +2;Selfishness = -3"
         ii. Q2: "Helpfulness = -1;Selfishness = +4"
         iii. Q3: "Helpfulness = +4;Selfishness = -5"
      b. The two potential "character results" are:
         i. Samaritan="Helpfulness = +10;Selfishness = -10"
         ii. Villain="Helpfulness = -10;Selfishness = +10"
      c. By combining the results of the three questions the quiz taker's "Helpfulness" rating is at "5", (2-1+4=5), and their "Selfishness" rating is at "-4", (-3+4-5=-4).
      d. Now the absolute value of the difference in these ratings are calculated for each "character result":
         i. Samaritan Difference: $|((10)-(5))| + |(-10)-(-4)| = 5 + 6 = 11$
         ii. Villain Difference: $|((-10)-(5))| + |(10)-(-4)| = 15 + 14 = 29$
      e. From the differences calculated, the smallest difference is selected and presented to the quiz taker as "their" character, so in this example based on the quiz taker's answers, they would be presented with the "Samaritan" character since 11 is smaller than 29.

4. Take Quiz
   a. Upon selecting "Take Quiz" the user is presented a list of available quizzes, listed by title.
   b. After selecting a quiz the user is shown the quiz title and description, along with the first question.
   c. The user will answer each question by clicking on one answer of their choosing for each question.
      i. Questions are presented one at a time, upons answering one it disappears and is replaced with the next question.
   d. After all questions have been answered the quiz calculates the most relevant character based on the user's responses, and then informs the user as to which character they most closely align with.