

## Minimal Requirements

- (1) The user shall be able to write and design a quiz in a plaintext (.txt) format.
  - a. The syntax for writing this quiz shall be simple enough such that it is accessible for non-programming people.
  - b. The language with which quizzes can be written shall allow for the user to write questions, answers, and feedback.
    - i. For a given question, the feedback section shall be optional.
  - c. The language with which quizzes can be written shall allow for the user to provide randomly selected variables to be used when presenting the quiz.
    - i. A randomly selected variable shall be given a name and a list of random values to choose from.
- (2) The software shall be able to scan a preset directory for quiz files, and present these files to the user.
  - a. The software shall ignore any files in this directory that are not labeled with the extension ".txt."
  - b. The software shall label text files found in the quiz directory with an integer, and present this labeling to the user.
  - c. The software shall prompt the user to select a quiz by entering the integer used to label the quiz.
  - d. The software shall return to the quiz selection screen upon completion of a quiz.
  - e. The software shall return to the quiz selection screen if there is an error while trying to parse the quiz.

- f. The software shall exit if the user enters an integer that is not a valid label for a quiz.

(3) The software shall be able to parse a quiz file, and present the quiz to the user.

- a. The software shall be able to parse a quiz file, and store the data of the quiz in memory.
- b. The software shall present the user with descriptive error messages if it encounters an error while parsing the quiz.
- c. The software shall be able to sequentially present the user with questions of the quiz.
- d. The software shall be able to sequentially accept the user's given answer for each question.
- e. The software shall be able to check a given answer against the correct answer.
- f. The software shall be able to provide the user with feedback regarding whether or not the user's given answer is correct or not.
  - i. This feedback shall be able to be presented in two ways: immediate, and post-quiz.
- g. The software shall be able to provide the user with optional feedback written by the creator of the quiz if the user's given answer is incorrect.