

Assignment 1 – Quiz

In my program I implemented 4 custom objects:

1. Question-
 - a. questionID – the question serial number in the quiz.
 - b. Question – the question text.
 - c. Answers – array of 4 answers.
 - d. toString() – method to design the template for printing a question
2. Answer-
 - a. answerText – the answer text.
 - b. characterID – used for the calculation of the diagnosis, holds a number which represent the score for this answer.
 - c. toString() - method to design the template for printing an answer.
3. HogwartsSortingHat – a quiz that return the Hogwarts house most fit to the user.
 - a. Quiz – group all of the questions and the answers. In here the answers are ordered by their score.
 - b. startQuiz() – manages the running of the quiz(welcome, questions,results)
 - c. welcome() – prints a beautiful welcome headline.
 - d. Questions() – print the questions, waiting for an answer from the user. In this quiz I chose to implement the diagnosis with a counter array of length 4 (for each result type). Every time an answer received, the value of the cell of the counter array with index corresponding to the answer scoring is increased by 1.
 - e. showResults()- calculates the result by choosing the cell of the counter array with the maximum value. In case of equality between 2 cells, the first gets picked. At last, the results are presented to the user.
4. AngelOrDevilQuiz – a quiz that return whether the user is an angel or a devil. Most of methods are the same as the HogwartsSortingHat, except for the algorithm for calculating the result. Here, after every question the user answered, the scoring of the picked answer is added to a sum variable, and at the end of the quiz there are 3 ranges (for angel, devil and something between). The result is chosen by the value of sum.

In the beginning of the program the user is required to choose between the two quizzes.