King Fahd University of Petroleum & Minerals

College of Computer Sciences and Engineering

SWE 363: Web Engineering and Development (Term 182)

Homework Assignment #2 [Due Monday, March 4, 2019]

This assignment tests your understanding of basic HTML5, CSS3, JavaScript and JQuery [No server side programming]

Requirements:

Using HTML5, CSS2, JavaScript and JQuery to develop and an interactive page for an online quiz.

The main page will contain the following items:

- The user interface should display a company logo (use KFUPM logo) and
- A menu of available quizzes.

Once the user selects a quiz, he must provide his name and email address in a form in order to start the quiz. Use *form validation* and *regular expressions* to validate the user inputs.

The questions will then appear one at a time. Use at least 10 questions:

- 6 multiple choice questions with only one correct answer, and
- 4 multiple choice with more than two correct answers

Each group of questions is allocated *a time period* (say 12 minutes and 8 minutes, respectively). The examinee can go back and forth within each group of questions but not from one group to the other before the adjusted time period ends.

Once the user submits his answers, the system grades the questions and shows a report of his grade.

- 1) Total number of questions and percentage grade
- 2) Number and percentage of correctly answered questions in each group (shown as a pie chart)
- 3) Number and percentage of partially answered questions in the second group (shown as a pie chart)

The grade formula is a follows:

- 1) First group: one point for each correct question
- 2) Second group: one point for each correct choice and minus one point for each incorrect choice

Notes:

- 1. Create and use external style sheet
- 2. Create and use external JavaScript/JQuery

Validation of your created files

- 1. Validate your HTML files using https://html5.validator.nu/ and provide a screenshot of the result. A link to the validation results (snapshot) can be added in the footer of the webpage.
- 2. Validate your CSS files using https://jigsaw.w3.org/css-validator/ and provide a screenshot of the result. A link to the validation results (snapshot) can be added in the footer as well.

Submission

- 1. Create an account in CCSE server and publish your website there (NOTE: you can use a free server, but it is your responsibility in case of failure to access the website).
- Zip all the folder and name it 182-SWE363-Sec#-ID-Assignment2 (where Sec is your section and ID is your KFUPM ID), which include the HTML pages and the subfolders images, styles, and code. Submit through blackboard to your instructor.
- 3. Provide also the URL to access your website in an included readme file.

Due Date/Time

Homework is due at midnight on Monday, March 4, 2019. Furthermore, remember that you should not modify turned in work after the due time (unless informed otherwise by the instructor).

Grading

The work has to be yours and not copied from other sources. No cheating is allowed nor using other frameworks. Write clean code and follow good practices in structuring and developing the application. You must comment your code in all pages. Comments include a header comment at the top of the file, and comments within the code when a comment will help clarify the purpose of a line or section of code. You should also enter comments to explain where you found code that was not discussed in class.

These are the criteria we use to grade the homework:

- Folders and files have the required names and are uploaded to the location (that you provided its URL).
- Error-free according to the validation results (for HTML and CSS).
- Your files have comments at the top and as necessary interspersed in the code.
- The completeness and corrections of the application as described above.
- Creative design and appearance of the website with simple but elegant styling of the user interface and reports.
- The links are not broken, images (if used) have small sizes and been shown perfectly in the webpages.