ISEL / ADEETC

Informatics and Multimedia Engineering

Multimedia Authoring

3rd Laboratory Work

Multimedia Authoring

Usability Questionnaire

Rui Jesus

Introduction

This work aims to familiarize with HTML5 Web Forms 2.0 and LocalStorage technologies (including JavaScript). The goal is to implement an online usability quiz to collect user information about the experience his or her had using the image search website (similar to Google Images) that you are going to implement in the end of the semester.

Below is a link to the w3schools website that should be consulted during the development of the questionnaire.

http://www.w3schools.com/

Objectives

The application includes the development of 2 separate web pages in the same domain. One to receive the data provided by the user, validate and save in LocalStorage and another to retrieve the information collected from LocalStorage and present it in an HTML page.

At the end of the first lesson the student will need to have at least the page to collect the data developed including the data validation JavaScript code. The code with the two completed pages must be delivered by November 12, 2017 using the Moodle platform.

Laboratory work

Usability Questionnaire – Web page 1

1. Create a new project in IntelliJ IDEA and create its directories for CSS and content.

2. Create an HTML file and, using the attached questionnaire, construct the structure of the page with the structure/semantic tags.

3. Next, create a ".css" file and make an initial formatting of your questionnaire.

4. Using the HTML elements of Web Forms build the usability questionnaire. Must include validation attributes in elements (e.g., "required" or "pattern").

5. To access the data entered by the user, use handler events and functions in JavaScript. To better organize the code, create a JavaScript file (".js") within the project's "js" directory. In the HTML file you should only put the HTML code. At the end of the <head>

element, enter the following line of code to allow the html file to access the JavaScript file:

<script src = "form_manager.js"> </ script>

LocalStorage – Web Storage API

6. Using the HTML DOM and XML DOM organize the collected user data in an xml format, for example,

<Questionnaire>

<Question id = 'q1'> Answer given by user </ Question>

...

<Question id = 'qn'> Answer given by user </ Question>

</ Questionnaire>

7. Using the Web Storage API, namely the LocalStorage technology saves the data organized in xml format in LocalStorage (use the *window.localStorage.setItem()* method). In the slides of the subject there are examples that you should follow.

View the Answers – Web page 2

8. Create a new HTML page and include the ".css" and ".js" files..

9. Add JavaScript code (".js" file) to fetch the user response values from the LocalStorage (use the *window.localStorage.getItem()* method). Again, in the slides of the subject there are examples that you should follow.

10. View the information in the browser obtained from the LocalStorage by running the HTML file formatted according to the ".css" file.