

Project #2 Description

Internet Applications, 14013104-3, Group #2

Week #13, Tuesday 16 November 2021

(Total: 30 Marks)

Due Date: Week #16, Friday 10 December 2021
Online Printers Store website – Part 2

The project assignment is a way to measure your performance in the course. It will evaluate your abilities in web development based on topics and technologies you learnt in this course. You should build a small website (4 complete HTML web pages) that makes use of technologies such as HTML, CSS and JavaScript. The topic for your group is online **Printers Store website**.

1 Problem Scenario

Update the website that you have developed in project #1 to include the following extra functions:

- 1- **Add a login form section** to the website's home page (**index.html**). The login section would ask the user to enter his user name in a text box widget, his password in a password widget, a "remember me" checkbox and a "login" button. The form's submit event should be handled with a **JavaScript** function handler that validate the form input as following:
 - Check that the user name field is not empty and at least 4 characters.
 - Check that the password field is not empty and at least 6 characters.
 - If both the user name and password are not empty, the form data is submitted successfully to the server as expected.
 - If either the user name or password is empty, display an error <div> section that dynamically describes the exact error(s) (in red) and make sure that the form data is then not submitted to the server.
- 2- **Update the feedback FORM** page that includes fields such as: name, phone number, email address, subject, list of topics (e.g. Suggestion, Complaint, Idea, Help, ...etc.) in a drop down list as well as a textarea field for the message itself. The form's submit event should be handled with a **JavaScript** function handler that validate the form input as following:

- Check that the name field is not empty and at least 6 characters. In addition, write a **JavaScript** handler function that checks that name field does not include any digit (0-9) **while the user is writing his name** (i.e. with each key stroke and with the blur events for this name input field). If the handler finds any digit, it should give an error message in red beside the name field asking the user to remove the written digit. If the user removes the digit(s), the error message should be removed from the screen.
- Check that the phone number field is either empty or the phone number is a 12-digits number that starts with 9665. Hint: Make use of regular expressions (REGEX).
- Check that the email address field is not empty and that the email address follows the correct email format. Hint: Make use of regular expressions (REGEX).
- Also, check that subject, topic and message input fields are not empty
- After these tests and if there are no errors, the form data is submitted successfully to the server as expected.
- If there are any error in the user's input data, display an error <div> section that dynamically **in the top of the form** describes the exact **combined** error(s) (in red) and make sure that the form data is then not submitted to the server in this case.

3- Using JavaScript:

For all text, password and textarea boxes of the **login and feedback forms**, change the background color style of the text box that gets the focus event into yellow background color. Then it gets the normal white background color when it gets the blur (i.e. unfocused) event.

Display suitable error messages, **in red**, for each error case beside the data entry field in the 2 form web pages.

The forms should be submitted **only if there are not any errors**.

Try to make use of one **external** JavaScript file. Name the file as **script.js** and put it in separate **"/scripts/"** folder. Then add a <script> tag in the head of the HTML web page files to link to the **external JavaScript** file.

Reminder: Project #1 Requirements

Tools you might use include text editor (or any other text editor), Web browser, zip compression utility. You also need an Internet connection.

How you structure this information is up to you; however do not simply make one or two giant Web pages. Be thoughtful and creative. Do not use frames. Name the main web page file as index.html . **Use English contents and file names only.**

The web pages should be in HTML and W3C compliance-validated.

All image files should be contained within a separate directory called "/images/".

Use relative paths for linking internal pages and images.

Include different appropriate title and metadata (keywords and description) and comments for all of your pages.

CSS for all the pages should come from a **SINGLE external .css file (named styles.css)** in a "/css/" directory and include this external CSS file in the head section of your pages. Try to use the same styles: font type, font size, colors, ...etc in all your pages as much as possible. **Don't use inline or document-level CSS styles.**

Use the same menu links banner in all your pages that refer to all your pages in the website. Using CSS styles, the current page should always have its menu option with different style other than the rest of links.

Be creative as much as you can.

The website should contain 4 web pages including the following pages:

- 1- Home page (named ***index.html***) with general description and sub-sections with multiple headers. Try to make use of hypertext links to external web pages as well as including some images related to your topic. Use CSS styles to style your pages in a professional and consistent manner.
- 2- A feedback **FORM page** that includes fields such as: name, phone number, email address, subject, list of topics (e.g. Suggestion, Complaint, Idea, Help, ...etc.) in a menu selection as well as a textarea field for the message itself.

2 Project Team

Each group could consist of **two students at maximum**.

3 Testing

The developed website should be tested thoroughly. The system should be bug-free when delivered and should work properly. The web pages source codes should be clear, consistent, well-formed and concise within their HTML content, CSS, ...etc. All pages should have similar style, layout and behavior.

For testing the front-end web pages, try to use various client browsers. Those browsers should include at least: Microsoft Internet Explorer, Google Chrome and Firefox.

Try as much as possible to resolve any performance and slow load time issues. For example, make use of low size images (in storage) without sacrificing the images quality.

4 Evaluation

The total mark of the project will be **30%** of the total course mark.

5 Project submission

- 1- Please submit all your code files: html pages, images, css, Javascript, ...etc as a zipped file and upload the compressed zipped file to the **UQU's BLACKBOARD** e-learn website before the deadline. Don't forget to provide the names, student numbers, group numbers and email addresses of the participating students in a separate text file within the zipped file.
- 2- Your solution's compressed file should also include a separate **English text file called (names.txt)** that includes the names of the participating students, their student numbers, group numbers and email addresses.
- 3- Add a PDF document file **called (project2_report.pdf)** that includes screenshots of all your website's web pages **(when normally loaded and with Javascript validation errors)** and their URLs. Please, also include a screenshot of the directory structure of your deployed web application's folders and files on the website storage.

6 Notes

- Each group should work independently. Any copying of web pages, css, Javascript, ...etc will be treated seriously. **You could lose the whole mark for cheating or copying from another group or from the Internet.**
- Please, use **only** the technologies, techniques, languages and tools that you have studied in the lectures and labs of this course.