Ollscoil Teicneolaíochta an Atlantaigh

Atlantic Technological University

BACHELOR OF SCIENCE IN COMPUTING AND DIGITAL MEDIA
YEAR 2

APPLIED DIGITAL MEDIA 1

ASSESSMENT 2 – JAVASCRIPT – GROUP B

ADDITIONAL INFORMATION PERTAINING TO THIS ASSESSMENT:

- The maximum duration of the assessment is 1 and a half hours.
- You can use the Internet to access Moodle and other sources, but not for messaging/communications purposes.
- Network is monitored during assessment.
- No talking during the assessment.
- Phones must be put on silent and away for duration of the assessment.
- Once you have completed and submitted the assessment you are required to leave.

EXAMINATION FORMAT

5 Questions in Total
Attempt All Questions
All questions carry equal marks.

TIME ALLOWED: 1.5 HOURS

Note 1: For each question, have separate HTML and JavaScript files, and ensure they are linked.
Note 2: Include comments in your code.

Question 1

Use JavaScript to prompt a user to enter a number. Check the number entered is any value from 1 to 20. If it is, then print out to the web page the statement "Assessment 2" as many times as the number entered at the prompt. For example, if the user enters 2 at the prompt, then Assessment 2 is printed to the screen twice. If the user enters a number which is not from 1 to 20 at the prompt, then nothing is printed to the screen. See figure 1 below for example.

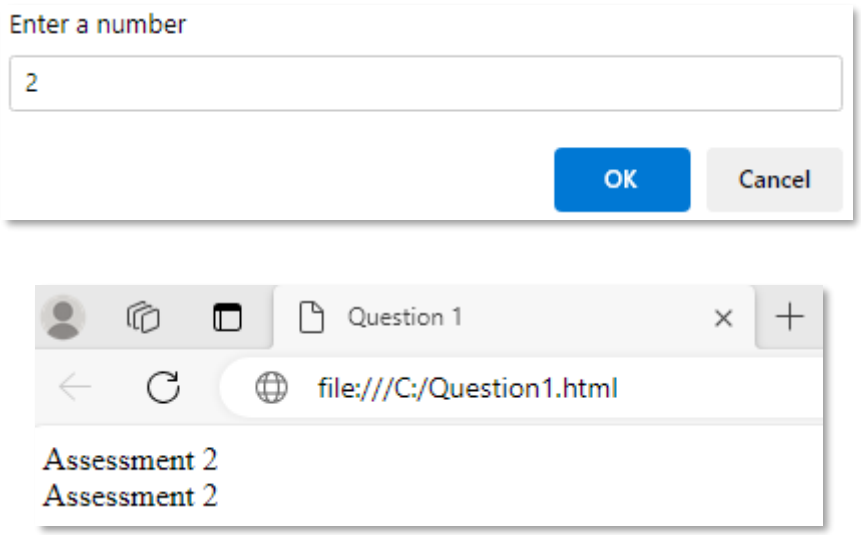


Figure 1 – Enter 2 at the prompt and output “Assessment 2” 2 times to web page.

Question 2

Use JavaScript to prompt a user what month of the year it is. Check the month entered is December. If it is, then print out the statement "Correct, it is December" using an alert. If it isn't, then print out the statement "Incorrect, it is December" using an alert. See figure 2 below for example.

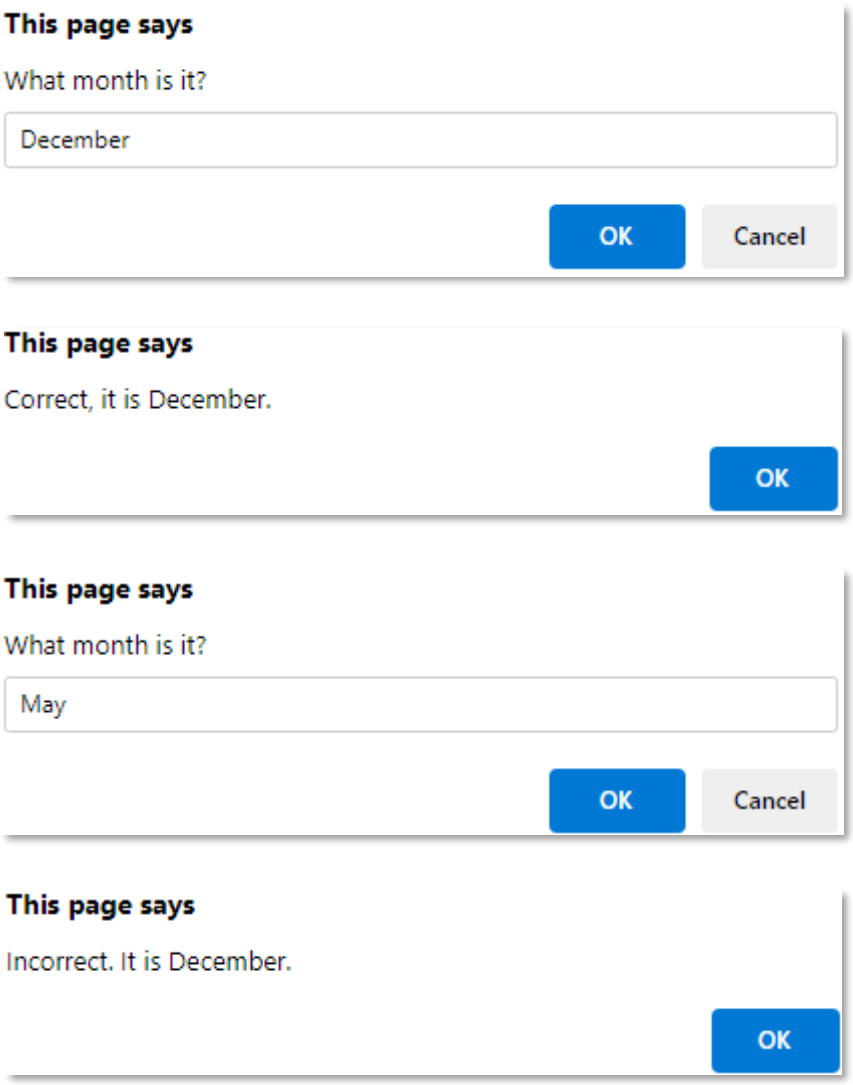


Figure 2 – Two examples. First prompt, enter December, get an alert indicating correct, it is December. Second prompt, enter May, get an alert indicating incorrect, it is December.

Question 3

Use JavaScript to create a function named correctMonth(x). This function can be passed a single value, x. The function should check whether this value is December or not and return the result. Use a prompt to ask a user to enter the month. Pass this value to the function, and then display the result returned by this function on the web page. See figure 3 below for example.

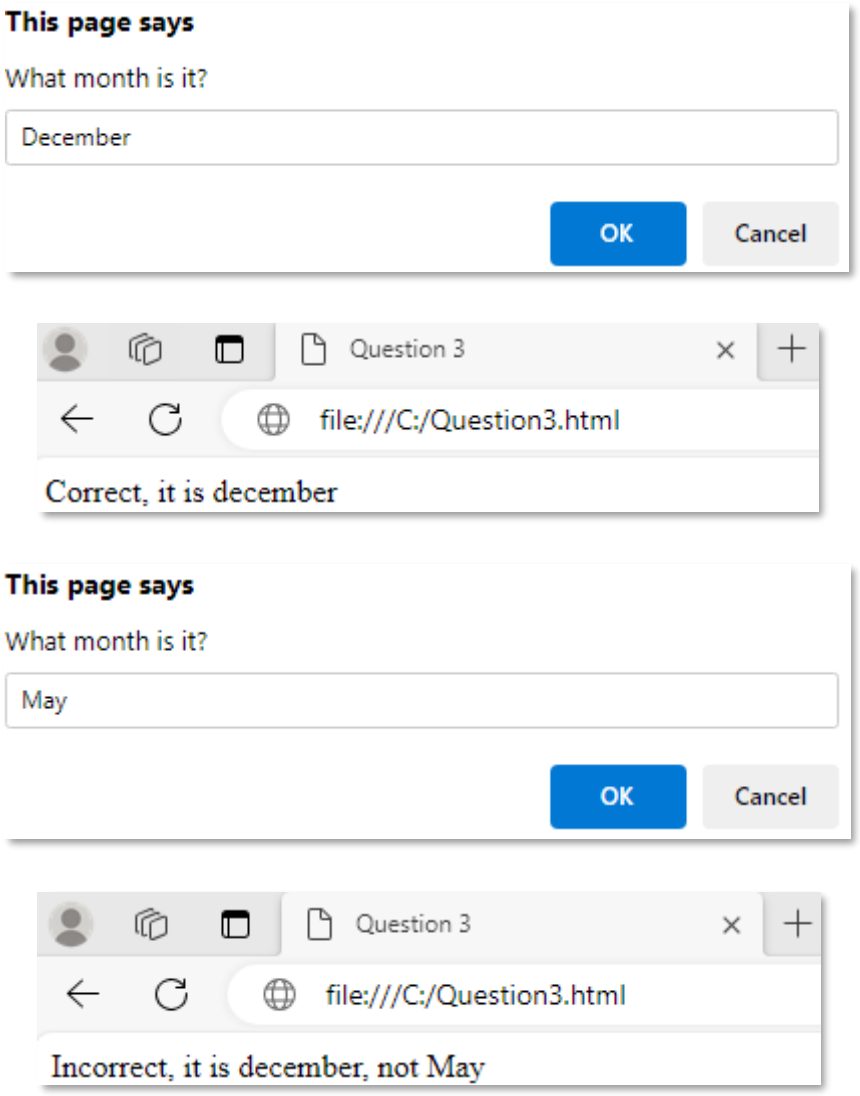


Figure 3 – Two examples. First prompt, "December" is entered at the prompt, then passed to function which confirms it is December and returns a value indicating this. As a result, "Correct, it is december" is written to the web page. Second prompt, "May" is entered at the prompt, then passed to function which confirms it is not December and returns a value indicating this. As a result, "Incorrect, it is december, not May" is written to the web page.

Question 4

Consider the following array:

```
let array = ["Red", "Green", "Blue"];
```

Write JavaScript code to do the following:

a. Print the contents of this array to the web page.
b. Use the splice function (click here for information on the splice function) to remove the second value from this array, and print the contents of this updated array to the web page.

An example output is shown in figure 4 below:

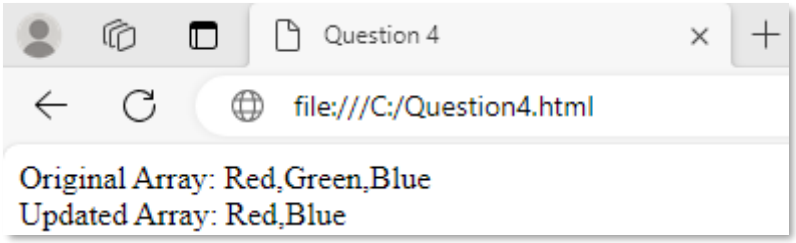


Figure 4 – Original array and updated array printed out to web page.

Question 5

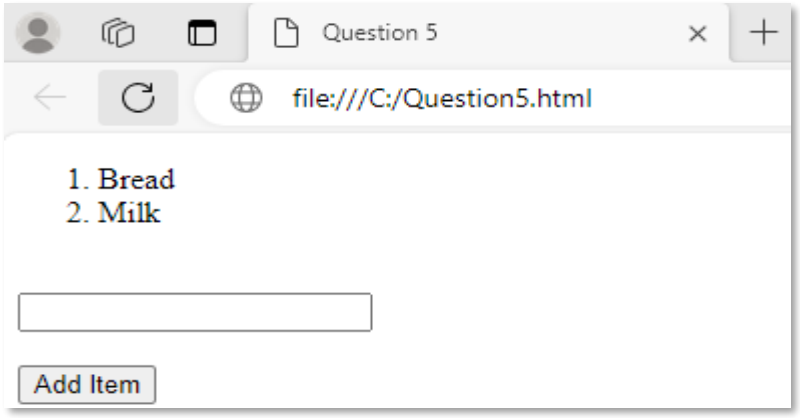
For this question, download the Question5.zip file which is included with this assessment on Moodle. Unzip this file. It contains two files, Question5.html and Question5.js. Open both these files in an editor and complete the following tasks:

1. Use JavaScript to read all the values from the following array:

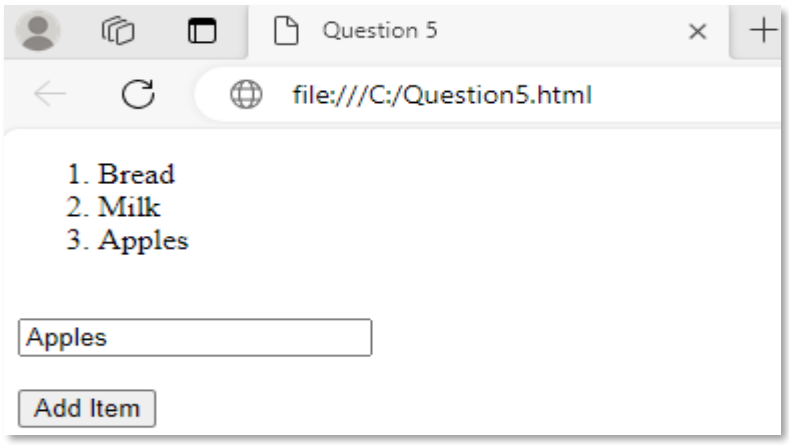
   ```
   let shoppingList = ["Bread", "Milk"];
   ```

2. The values from the array should be written to the div element on the HTML page as an ordered list (<ol>).
3. Write a JavaScript function named add, which is invoked from clicking the Add Item button. This button should read any value typed into the input field and add it to the shoppingList array.
4. Once the item is added to the array then the ordered list (<ol>) in the div element on the screen should be updated to include this new value.

An example output before value typed into field:



An example output after a value is typed into the input field and the Add Item button is clicked:



Add all files from the assessment to a zip file and upload it using the link available in Assessment 2 section on the Module Moodle page.