

ITSE 2302 – Program 04

All of the assignments in this course must be uploaded to Bb **and** *published to your student website*. Use the numbered list below **and** the Common Requirements as a confirmation checklist.

- Complete the steps described at the Website Setup & Publishing link in the “Assignments” section in Bb.
- Use the course material located at
 - [HTML Tutorial](#) , [CSS Tutorial](#) , [JavaScript Tutorial](#)
- Program 04 can be completed using content from these tutorial sections:
 - HTML HOME – DOM Node Lists
- Develop the page/site for your user – Communicate with your user.

Requirements (remember to identify the requirements by #number):

Note: the requirements below refer to the index.html within the program-## folder unless otherwise stated.

1. The Program 04 link on your top-level page should open an index.html page in the program-04 folder. Include a function defined via a function expression that displays the current date and time in an h2 at the top of the page when the page is opened. Add an id="dateDisplay" to the h2. Include a self-invoking function that changes the color of the date text that was printed by the first function.
2. Include a function that accepts a color as a parameter and applies that color to the date text in requirement 1. Provide a select list of colors and use the onchange() event to pass the color selected to the function which changes the date text to that color.
3. Use a body onload() event to check if cookies are enabled. As always, display the status of the check.
4. Button – calls a closure that displays a count and a random number between 1-100 inclusive each time the button is pressed. By the way, closures enable what other languages call ‘static’ behavior.

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5. Include 5 paragraphs with text. Include a common class name in the paragraphs. Use HTML DOM methods and iteration to hide and display the contents of all 5 paragraphs via toggle functionality.
6. Button – calls a function that changes the font size and font family of the 5 paragraphs in the previous requirement.
7. Button – calls a function that displays all of the innerHTML values of all HTML elements on the page.
8. Include a 2 row x 3 column table in the middle of the page. Include a select list of image names below the table. When user selects an image name that image is displayed in the table. When user selects another image, the first image selected is no longer displayed, and the newly selected image is displayed. Each of the six images is displayed in its own cell.
9. Use the HTML Web Workers API to cycle through 5 different images every 3 seconds, 1 image is displayed at a time. The images should be displayed in the same location on the page (not the table from above). Include “Start Worker” and “Stop Worker” buttons.
10. Button – calls a function that toggles the visibility of the image in requirement #9. Use JavaScript to assign the event to the button.
11. Add an event listener to the button in the previous requirement that changes the color of the button when the mouse moves over it.
12. Include a link named “Requirement #12” to requirement-12.html. Add an event listener that changes the background color of the body to a random color when the window is resized.
 - a. Use the function below (or your variation) to generate the random color value.

```
var backgroundColor = '#' + ('000000' +
  Math.floor(Math.random() * 16777215).toString(16)).slice(-6);
```

- b. Include a button “Go Back” on the requirement-12.html page that navigates back to program-04/index.html (i.e. the previous page).

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- 13.Button – calls a function that creates a paragraph element (using createElement) with the text “I’ve just been created!” and appends it to the DOM.
- 14.Div – when mouse moves over calls a function that determines the total number of paragraphs on the page and displays that number.
- 15.Button – when clicked, changes the content (text displayed) of the button and the color. For example:



TEST – TEST – TEST your website to ensure the requirements are met.

1. Use the list above **and** the Common Requirements as a confirmation checklist.
2. Not meeting all requirements = 0 points for the assignment.
3. Complete the appropriate Program ## confirmation in Bb by the due date.
4. Upload your .zip file to Bb under the appropriate Program ## link by the due date.
5. Ensure your assignment functions correctly on your student website and that all requirements are identified by “#XX”.
6. Remember to study for the exam. Distributing learning over time is far superior than panic-study in close proximity to the exam date.