

# Nursery Web Sample

## Explore the Developer Tools

Open the **index.html**

Open the Elements panel to inspect the DOM or CSS in the Box Model diagram in the Styles tab, examine the element Run JavaScript in the Console.

Compare the html codes and html tree in the Element panel. Alt+Click Arrow to expand all

## Find HTML elements (use console directly)

```
document.querySelector(".wrapper-box") // one element
document.querySelector(".nursery-box").firstChild//
document.querySelector(".nursery-box").children[0] //
document.querySelectorAll(".nursery-box").children[1] // error!!!!
document.querySelectorAll(".nursery-box")[0].children[1] //
document.querySelectorAll(".nursery-box").firstElementChild. nextElementSibling //
document.querySelectorAll(".nursery-box")[0].querySelectorAll("p") //
document.querySelector(".nursery-box").children[1].innerText
document. querySelector("nursery-box").children[1].innerHTML
```

Try using different selection methods. [https://www.w3schools.com/jsref/dom\\_obj\\_document.asp](https://www.w3schools.com/jsref/dom_obj_document.asp)

## Linking JavaScript file

Use the script tag to link a JavaScript file to your webpage <script src="..."></script> near the end of at the <body>...</body>

## Modify the properties of your HTML elements

- Modify the properties of your HTML elements
  - Change the src of an image file
  - Change the innerHTML of a tag. (e.g. include <p>, <strong> and <em>)
- Add HTML elements to your page
  - Add child HTML elements. (e.g. <p>, <strong> and <em>)
  - Add text to your HTML elements
- Remove HTML elements from your page

In your JS file, test if JavaScript is working properly in your webpage.

## Modify the CSS of your HTML elements

Modify the styles of your HTML elements, via the style object.

e.g. `document.querySelector("#greetings").style.color="pink"`

Look for the element in the HTML panel and its style in the Style panel.

[https://www.w3schools.com/jsref/dom\\_obj\\_style.asp](https://www.w3schools.com/jsref/dom_obj_style.asp)

## JavaScript Functions

```
var introBox = document.querySelector("#intro");
// Create an element <p>
var pEle = document.createElement("p");

//Create a text node
var txt = document.createTextNode("Introduction");
pEle.appendChild( txt );

//Append the created element <p>, along with text, to the element div
introBox.appendChild(pEle);

function write( selector, txt ) {
    var box = document.querySelector( selector );

    // Create an element <p>
    var pEle = document.createElement("p");

    //Create a text node
    var txt = document.createTextNode( txt );
    pEle.appendChild( txt );

    //Append the created element <p>, along with text, to the element div
    box.appendChild(pEle);
}

write( "#intro", "Introduction");
```

## Modify the properties of a “box”, be creative.

- Change the background colour of the first "nursery-box" box to a random additive colour.  
Hint Use `document.querySelector( ".nursery-box" )` to select the first element
- Change the background colour of the second "nursery-box" box to a random subtractive colour.  
Hint: Use `document.querySelectorAll() ....`
- Change the image source of the first "nursery-box" box's "humpty-dumpty"

## Add Event Listeners.

- Change the background colour of the body to a random additive colour when the page is loaded.
- Change the style of an element by adding and removing Class Name.
- Add a button (with html `<button>`) and when it is clicked, toggle the colour of an element (e.g. body).