Coding Activity 7.2

DOM Manipulation Activity

#### **Learning Outcome Addressed**

 9. Use JavaScript to dynamically display data on a web page

**Working With The DOM In JavaScript**

### DOM Manipulation

When creating web pages, you'll often find yourself needing to change the structure of the page in some way. This is usually done using the Document Object Model (DOM).

The **DOM** is the data representation of elements, structure, and content of a web page. It allows languages like JavaScript to change the structure of the page, style and content.

The **DOM** is not a programming language, but without it, the JavaScript language wouldn't have any model or notion of web pages, HTML documents, and their elements.

One of the popular DOM methods is getElementById(id). This method returns the element whose id property matches the specified id parameter. Since element IDs are required to be unique if specified, they're a useful way to get access to a specific element quickly.

For example, consider the following HTML code:

<html>  
<head>  
  <title>DOM - getElementById</title>  
</head>  
<body>  
  <p id="title">JavaScript rocks!</p>  
</body>  
</html>

The following JavaScript code identifies and returns the value of the element "title":

var titleContent = document.getElementById("title").innerHTML;  
   
console.log(titleContent);  
// result: "JavaScript rocks!"

**Using DOM to calculate the width of a page element:**

Your task in this activity is to write a JavaScript function called getWidth(id) that returns the width of the element specified with the parameter id. The result should be in pixels (for example, the function could return: "50 px").

Hint: You can checkout [*the following documentation*](https://developer.mozilla.org/en-US/docs/Web/API/Element) learn more about the different document methods available for use.

Task

The result should be in pixels (for example, the function could return: "50 px").

<!DOCTYPE html>

<html>

<head>

    <title>DOM Manipulation</title>

    <link rel="stylesheet" type="text/css" href="./style.css" />

</head>

<body>

    <div id="mainDiv">

        The width of this area is: <span id="areaWidth"></span>

    </div>

</body>

<script src="./finddom.js"></script>

</html>

function getWidth(id) {

  // Return the width of the element specified in the parameter "id"

}

// No need to change below this point.

// Note how we're using DOM elements here to display the result of the getWidth() function inside the "areaWidth" element

window.onload = () => {

  document.getElementById('areaWidth').innerHTML = getWidth('mainDiv');

};

//don't change this line

if (typeof module !== 'undefined') {

  module.exports = { getWidth };

}