Download the file named ***cash_convertor.zip*** from Moodle and open in **VSC**

Add new events to the selection drop down menu and the button inside the <form> tag in **index.html**

```
    <!--dropdown calls passSymbol & uses 'this' keyword to pass value-->
    <select id="selection" onchange="passSymbol(this.value)">
        <option selected hidden>choose currency</option>
        <option value="euros">Euros(€)</option>
        <option value="$">Dollars($)</option>
    </select>
    <input type="text" name="converted" id="converted">
    <label for="converted" class="converted">CONVERTED</label>
    <br>
    <br>
    <!--button calls clearFields function-->
    <button type="button" id="btn" onclick="clearFields()">RESET ALL</button>
</form>
```

1

2

1. When the selection drop-down menu is clicked the **onchange** event will 'fire' in the browser – the function named **passSymbol()** will be invoked(called) and the **value** stored in the current selection will be passed to the function **passSymbol()**

NOTE: *The **'this'** keyword has many different meanings in JavaScript, in this instance it is referring to the currently selected elements* **value** ***i.e.*** *- the option the user selected*

2. The button with *ID* of '**btn**' when clicked will call the function named **clearFields()** – which will reset the input fields to blank/no content

The JavaScript:

We need to test what the user selects to see if they want to convert to ***euros*** or ***dollars***.

Create a function named **passSymbol()** which receives the **value** passed from the select drop down menu----comment out the final brace with the **//END FUNCTION….**

```
1   function passSymbol(symbol) {
2
3
4   } //END FUNCTION passSymbol
```

Use an **IF** statement to determine what passed to the passSymbol function

NOTE: The **symbol** variable is a local variable created as a parameter waiting to receive the **value** passed earlier using the '***this***' keyword

```
function passSymbol(symbol) {

    if (symbol === "euros") {

    }
```

IF the **symbol** passed is equal to "**euros**" then we want to calculate pounds to euros.

Capture the user input **value** by using getElementById() or similar

```
function passSymbol(symbol) {
    if (symbol === "euros") {
        let pounds = document.getElementById("pounds").value;
    }
```

- Perform the calculation by multiplying the value the user entered by the exchange rate
- Create the variable ***finalEuro*** which stores the final **value** to **2** decimal places using the **toFixed** method

```
function passSymbol(symbol) {
    if (symbol === "euros") {
        let pounds = document.getElementById("pounds").value;
        let euro = pounds * 1.14;
        let finalEuro = euro.toFixed(2);
    }
```

In the above code the value is retrieved – using the code below the value is **set** - the value then displays inside the input field with ID of '**converted**'

NOTE: Remember those *string literals*

```
        let finalEuro = euro.toFixed(2);
        document.getElementById("converted").value = `€ ${finalEuro}`;
    }
```

Next – create an **else If** condition that will run if the user select **dollars** – the code/logic for this block should be the same as the last block – just a different ***conversion rate*** and some different **variable** names, so here is the rest of the code

```
8       } else if (symbol === "$") {
9           let pounds = document.getElementById("pounds").value;
10          let dollar = pounds * 1.34;
11          let finalDollar = dollar.toFixed(2);
12          document.getElementById("converted").value = `$ ${finalDollar}`;
13      }
14  } //END FUNCTION passSymbol
```

Resetting the fields to no content:

The **<button>** created earlier inside ***index.html*** resets everything to blank by calling the **clearFields()** function – let's create the function now

```
15  function clearFields() {
16
17  } //END FUNCTION clearFields
```

Using the **querySelectorAll()** method select all the input fields that are of **type=text**. All the fields retrieved will be stored in an **ARRAY** named **fieldArray**

```
14  function clearFields() {
15      let fieldArray = document.querySelectorAll("input[type=text]");
16  } //END FUNCTION clearFields
```

We can now loop through the array using a **for loop** – each time the loop runs it will change the **value** of the input fields stored in the **fieldArray** to blank

```
14  function clearFields() {
15      let fieldArray = document.querySelectorAll("input[type=text]");
16      for (i = 0; i < fieldArray.length; i++) {
17          fieldArray[i].value = "";
18      }
19  } //END FUNCTION clearFields
```

This last line inserted just after the loop will set the drop-down menu back to the default setting of '***choose currency***'

NOTE: **selectedIndex** works like an array and is indexed based, therefore if you change it to **1** when reset is pressed it will reset to the second element which is ***Euros*** and **2** would be ***Dollars***

```
18      }
19      //sets the dropdown menu back to default
20      document.getElementById("selection").selectedIndex = 0;
21  } //END FUNCTION clearFields
```

TASKS:

- Add the **number()** method after you have captured the user input to make sure you are working with numbers
- Add more currency conversion types
- Attempt to fix the redundancy issue discussed in class
- Add to the App any ideas of your own