**Guide**

The purpose of this exercise is to gain experience using *CSS3 variables*. These are **different** from Sass-style variables; Sass variables are defined in the Sass file, but once compiled to CSS the values cannot be updated. *CSS3 variables* can have their values updated through the use of JavaScript. The input *HTML elements* have a name property that corresponds with the CSS properties we want to update. We can create *CSS3 variable references* and attach them to the root element, provide them with some default values, and utilize JavaScript to attach *event listeners* to the input *HTML elements* that will call upon an *event handler* function whenever the input values have been changed by the user. We will define the function to target the *entire document* and update the values of the CSS variables from there.

**Steps:**

* CSS:
  1. Declare a new style for the :root element and declare three variables inside the style definition for :root with the same names as the input *HTML elements*. *CSS3 variables* are declared in the following syntax format:
  2. /\* Two hyphens (--) followed by the variable name \*/
  3. :root {
  4. --base: #ffc600;
  5. --blur: 10px;
  6. --padding: 10px;

}

* 1. Declare a new style for the img element and set the background, filter, and padding properties to the variables we defined at the root element:
  2. /\* 'var(--variableName)' to use previously defined CSS properties \*/
  3. img {
  4. background: var(--base);
  5. filter: blur(var(--blur));
  6. padding: var(--padding);

}

* 1. Declare a new style for the .hl class and set the color to the base variable.
* JavaScript:
  1. Declare & define a variable as a reference to all of the inputs on the page.
  2. Iterate through the *HTML Node Elements* that the variable is referencing and attach *event listeners* to each one that will call on an *event handler* whenever the input value has been changed (the change event).
  3. Repeat step 2, listening for mouse movements on the inputs instead of value changes (the mousemove event).
  4. Define a function that will be used as the *event handler*. It will update the value of the *CSS3 variable* **at the root document level** corresponding with the name property of the input element which called this function.
     + Minor 'gotcha': Properties like padding and blur won't update because the value from the input does not include the type of measurement we are using ('px', 'em', etc.). The input *HTML elements* also have a data-sizing property if they require a suffix. We can use this to attach the correct suffix to the value if necessary.