

- In today's demo exercise, we will use a different tool to test our JavaScript codes. We will use this awesome tool called CodePen.
- Is a platform where developers and designers can create, test and share snippets (called pens) of HTML, CSS, JavaScript or any other framework, library or preprocessor that generates them. Since it has a web-based code editor, you can change your code and see the result immediately, which allows quicker debugging. It's perfect to test new designs or build specific components.
- Before we begin testing our JavaScript codes today, please head to <u>CodePen</u> to sign up a free account. The sign up process should only take a minute or two.
- After signing up, leave your CodePen page stay open.



- To help you understand how things work for our exercises today, for each exercise, you will be given:
  - 1. A link to a CodePen exercise. Fork this exercise so it's saved on to your own account. What is fork? Fork means clone, make a copy, duplicate.
  - 2. Codes to enter on to your forked CodePen exercise.

Note: Do not work or make any changes to the original codepen exercise. You should only work on the forked pen that you'd saved.



**Exercise 1:** insert content into an empty element on the page using the innerHTML property.

- Fork this pen: <a href="https://codepen.io/rloke/pen/KKgrjVR">https://codepen.io/rloke/pen/KKgrjVR</a>
- You will notice that there's already HTML markup set up for this exercise (see HTML window). And on the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the JS window, enter the following script:

```
document.getElementById("demo").innerHTML = "Hello World!";
```

On live view, text display automatically:

#### **HTML DOM Properties & Methods**

This demo illustrates how to insert content into an empty element on the page using the innerHTML property.

Hello World!



Exercise 2: user click on existing text and is replaced with a new text.

- Fork this pen: <a href="https://codepen.io/rloke/pen/ZEpmdQq">https://codepen.io/rloke/pen/ZEpmdQq</a>
- You will notice that there's already HTML markup set up for this
  exercise (see HTML window). No JavaScript codes needed to be
  entered for this exercise. And on the Live View (white window), you
  should see the content printed from the HTML.
- On live view, click on the text:

Click This Text! —— Hello!



**Exercise 3:** Events are handled if changes are to affect another element.

- Fork this pen: <a href="https://codepen.io/rloke/pen/NWREZGa">https://codepen.io/rloke/pen/NWREZGa</a>
- You will notice that there's already HTML markup set up for this exercise (see HTML window). And on the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the JS window, enter the following script:

```
function changeText() {
  document.getElementById("demo").innerHTML = "Hello!";
}
```

On live view, click on the text:

**Click This Text!** 

Hello!



**Exercise 4:** Display current date.

- Fork this pen: <a href="https://codepen.io/rloke/pen/JjReQRP">https://codepen.io/rloke/pen/JjReQRP</a>
- You will notice that there's already HTML markup set up for this exercise (see HTML window). And on the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the JS window, enter the following script:

```
function displayDate() {
  document.getElementById("demo").innerHTML = Date();
}
```

On live view, click on button:

Click on the button to display the current date.

Get Date & Time

Fri Jan 15 2021 00:23:58 GMT-0600 (Central Standard Time)



#### **Exercise 5:** Display current date.

- Fork this pen: <a href="https://codepen.io/rloke/pen/JjRwNNB">https://codepen.io/rloke/pen/JjRwNNB</a>
- You will notice that there's already HTML markup set up for this exercise (see HTML window). And on the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the JS window, enter the following script:

```
document.getElementById("myBtn").onclick = displayDate;
function displayDate() {
   document.getElementById("demo").innerHTML = Date();
}
```

 On live view, click on button: Click on the button to display the current date.

Get Date & Time

Fri Jan 15 2021 15:46:44 GMT-0600 (Central Standard Time)



**Exercise 6:** Inserting text in html element by using the onload event.

- Fork this pen: <a href="https://codepen.io/rloke/pen/eYdbWVy">https://codepen.io/rloke/pen/eYdbWVy</a>
- On the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the HTML window, enter onload within the open body tag:

```
<body onload="insertText()">
```

In the JS window, enter the following script:

```
function insertText() {
  document.getElementById("demo").innerHTML = "Hello!";
}
```

On live view, the text will display upon browser loads:

This example shows texts inserted in an empty element when the page loads on the browser.

Hello!



**Exercise 7:** Display text in html element using onChange event.

- Fork this pen: <a href="https://codepen.io/rloke/pen/PoGXmBP">https://codepen.io/rloke/pen/PoGXmBP</a>
- On the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the HTML window, enter onchange within the open input tag:

```
Enter your name: <input type="text" id="fname" onchange="insertText()">
```

In the JS window, enter the following script:

```
function insertText() {
  document.getElementById("demo").innerHTML = "Hello!";
}
```

On live view, enter name and click away from it:

This example shows an event triggered when user tab away after entering text in a text field	l.
Enter your name: Rich	
Hello!	



Exercise 8: Capturing and display text in html element using onClick event.

- Fork this pen: <a href="https://codepen.io/rloke/pen/JjRwNmw">https://codepen.io/rloke/pen/JjRwNmw</a>
- On the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the HTML window, enter onclick within the open button tag:

```
<button onclick="myFunction()">Click to Display
```

In the JS window. enter the following script:

```
function myFunction() {
  var x = document.getElementById("myForm").elements[0].value;
  document.getElementById("demo").innerHTML = "Hello " + x;
}
```

 On live view, click on button:

This examp	le illustrates how to capture text entered in a text box and then display on the page
First name:	John
Last name:	Doe
Click to Dis	play
Hello John	



**Exercise 9:** Capturing/display sequential text in html element using onClick event.

- Fork this pen: <a href="https://codepen.io/rloke/pen/PoGXmyP">https://codepen.io/rloke/pen/PoGXmyP</a>
- On the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the HTML window, the onclick event is already entered in the open button tag.
- In the JS window, enter the following script:

```
function myFunction() {
  var ref = document.getElementById("myForm");
  var txt = "";
  for (var i=0; i<ref.length; i++) {
    txt = txt + ref.elements[i].value + "<br>";
  }
  document.getElementById("demo").innerHTML = txt;
}
```

In Live View, click on button:	]
This example illustrates capturing texts entered in text boxe	and then disp
First name: Jane	
Last name: Doe	
Age: 34	
Email: jd@gmail.net	
Click to Display	
Jane	
Doe	
34	
jd@gmail.net	



Exercise 10: Revealing/display content in html element using onClick event.

- Fork this pen: <a href="https://codepen.io/rloke/pen/YzpKWde">https://codepen.io/rloke/pen/YzpKWde</a>
- On the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the HTML window, the onclick event is already in the open input tags.
- In the JS window, enter the following script:

```
function ShowHideDiv() {
   var checkYes = document.getElementById("yes");
   var sample = document.getElementById("example");
   if (checkYes.checked) {
       sample.style.display = "block";
   } else {
       sample.style.display = "none";
   }
}
```

In Live View, click on the yes button:

Click yes to see an example of a HTML image element. • Yes No

<img src="" alt="" width="" height="" >



**Exercise 11:** Changing style of content in html element using onClick event.

- Fork this pen: <a href="https://codepen.io/rloke/pen/vYXvZEO">https://codepen.io/rloke/pen/vYXvZEO</a>
- On the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the HTML window, enter onclick within the open button tag:

```
<button onClick="changeStyle()">Change</button>
```

In the JS window, enter the following script:

```
document.getElementById("heading1").style.color = "#00bc99";
document.getElementById("heading1").style.fontFamily = "Impact";
document.getElementById("heading1").style.fontSize = "2em";

function changeStyle() {
    document.getElementById("heading1").style.letterSpacing = "0.2em";
}
```

In Live View, click on button:

Hello World!

Demo on changing the style of a HTML element.

Change



**Exercise 12:** Changing style of content in html element using eventListener.

- Fork this pen: <a href="https://codepen.io/rloke/pen/YzGdQpy">https://codepen.io/rloke/pen/YzGdQpy</a>
- On the Live View (white window), you should see the content printed from the HTML. We will add JavaScript to interact with HTML.
- In the HTML window, the onclick were removed from the open button tag.
- In the JS window, enter the following script:

```
document.getElementById("heading1").style.color = "#ccef48";
document.getElementById("heading1").style.fontFamily = "Impact";
document.getElementById("heading1").style.fontSize = "2em";

function changeStyle() {
    document.getElementById("heading1").style.letterSpacing = "0.2em";
}

var btn = document.getElementById("cBtn");
btn.addEventListener("click", changeStyle);
```

In Live View, click on button:

Hello World!

Demo on changing the style of a HTML element.

Change



#### **Submission:**

- Post all 12 of your Codepen exercise links on the message box in the dropbox at GAP Week 4 Day 2.
- Post at the end of this class session.