

Assignment 2 INFO 2323 2D Game Programming

Setup

We will be incorporating JavaScript into the code that we wrote from Assignment 1.

HTML Code

Start with the HTML code from assignment 1. We are going to add buttons, an input and script tags.

Change the title tag to say "JavaScript Enabled Buttons"

Remove the style tags. Replace them with this link tag.

```
<link rel="stylesheet" href="main.css">
```

The head tag contents should look like the following.

```
<head>
  <meta charset="ut-8">
  <title>JavaScript Enabled Button by Jayson McCune</title>
  <link rel="stylesheet" href="main.css">
</head>
```

As a reminder, replace my name with your own name in the title.

In the stage div tag we need to add div tags for the different rows of buttons and input.

The first row will hold the input field and the enter button. We will also have a paragraph tag to hold the text we want to display back to the user.

```
<div id="inputField">
  <input id="inputText" type="text">
  <button id="enter">Enter</button>
  <p id="output"></p>
</div>
```

Now we need to add a script tag that will pull in the JavaScript file.

```
<script src="scripts.js"></script>
```

The finalized HTML code will look like the below.

```
<!doctype html>
<html lang="en">
<head>
  <meta charset="ut-8">
  <title>JavaScript Enabled Button by Jayson McCune</title>
  <link rel="stylesheet" href="main.css">
</head>
<body>
  <div id="stage">
    <div id="inputField">
      <input id="inputText" type="text">
      <button id="enter">Enter</button>
      <p id="output"></p>
    </div>
  </div>
  <script src="scripts.js"></script>
</body>
</html>
```

Assignment 2 INFO 2323 2D Game Programming

CSS Code

We are going to create a new css file. Name the file main.css.

Put the CSS code from assignment 1 into this file.

Then add two selectors for the button tag.

The first selector will be the hover time and background color.

```
button {  
    transition-duration: 0.5s;  
    background-color: #559dc9;  
}
```

The second will be the hover action.

```
#button:hover {  
    background-color: white;  
    color: #559dc9;  
}
```

The finalized css code will look like the following.

```
#stage  
{  
    position: relative;  
    margin: 0px auto;  
    width: 400px;  
    height: 300px;  
    border: 1px dashed;  
}  
  
button {  
    transition-duration: 0.5s;  
    background-color: #559dc9;  
}  
  
button:hover {  
    background-color: white;  
    color: #559dc9;  
}
```

JavaScript Code

We will add JavaScript code in its own file to make the button interactive. Make sure to name the JavaScript file scripts.js.

First, we will need a variable to hold a reference to the HTML button.

Assignment 2 INFO 2323 2D Game Programming

```
let enterButton = document.querySelector("#enter");
```

Next we will need to add an event listener to listen for when a user clicks on the button. When the user does click on the button we will pass control to the enterClickHandler function that we create below.

```
let enterButton = document.querySelector("#enter");
enterButton.addEventListener("click", enterClickHandler, false);
```

We will add variables that will reference the output paragraph tag and the inputText input tag.

```
let output = document.querySelector("#output");
let input = document.querySelector("#inputText");
```

The enterClickHandler function will hold the code to respond when the user clicks on the button. The code will take the value of the input text and assign it to the innerHTML of the output paragraph tag.

```
function enterClickHandler()
{
    output.innerHTML = input.value;
}
```

Here is the finalized JavaScript code.

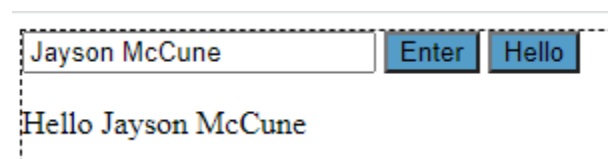
```
let enterButton = document.querySelector("#enter");
enterButton.addEventListener("click", enterClickHandler, false);

let output = document.querySelector("#output");
let input = document.querySelector("#inputText");

function enterClickHandler()
{
    output.innerHTML = input.value;
}
```

Additional Changes

Now you will on your own add a button to the HTML code. This button will have the label be the word Hello. When the user clicks on this button the JavaScript code should take the text in the inputText field and add Hello to the front of it with a space after it. If I enter my name into the text field then the output should be Hello Jayson McCune. Here is a screenshot of the output.



Assignment 2 INFO 2323 2D Game Programming

Submission

Put all three files, HTML, CSS, and JavaScript into a single folder. Zip the folder and submit it through the Canvas assignment.