Lab 2 JavaScript Basics

CSCI2720 Building Web Applications



- Using the console
 - Simple arithmetic
 - Arrays
 - Arrow functions
- A simple page with scripts
- Events

Using the console

- For consistency, we will use Google Chrome for our development use
- Learn to start the console in Developer Tools
 - Windows: Ctrl+Shift+J
 - Mac: Command+Option+J
 - Check this out:
 - https://developers.google.com/web/tool
 s/chrome-devtools/shortcuts
- To test JS code, you can run directly in this console, or output debug messages with console.log(...)

Task 1.

Simple arithmetic

Try this code in the console

```
let x = prompt("What is your age?");
let y = new Date().getFullYear();
let z = y - x;
alert("I guess you were born in "+z);
}
```

- Can you make this program better by judging about the date too?
 - You may find this useful:

```
https://www.w3schools.com/js/js
dates.asp
```

Task 2.

Arrays

•Given this array:

```
let a = ["red", "pink", "green"];
```

- •Using .splice(), delete "pink"
 and add "orange" and "yellow"
- Ask the user for one extra color name and store it at the end of the array
- How can you sort the array and store results in another variable b?
- Print the array using a for..of loop,
 using document.write() and

Task 3.

Arrow functions

•A simple arrow function looks like this:

```
let hello = () => alert("Hello!");
```

Convert the following function check() into an arrow function of one line:

```
function check(year) {
  if (year>3)
    return true;
  else
    return false;
}
```

Consider this array:

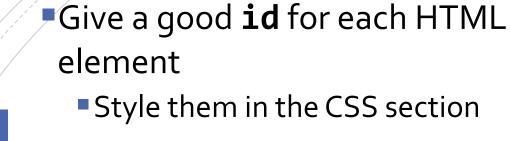
```
let student = [1,4,3,5,2,1,4,3];
```

•How can your new function be used with the array function .filter() to output only qualifying elements?

Task 4.

A simple page with scripts

- For most of the case, you use JS with HTML/CSS
- <u>codepen.io</u> is one easy platform for trying and development
 - You may try using plain files and <script> too
- Now, create a new codepen and set up a simple HTML page containing:
 - **■**h3
 - **p**
 - input type=text
 - button type=button



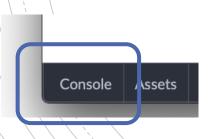
In the JS section, see if you can obtain the element using

```
document.getElementById() or
document.querySelector()
```

- Try that by outputting .innerHTML of the selected element to console
- Codepen console can be found in the link at the page bottom
- After editing some code, the page (and script) can be reloaded if you click in the preview area

Task 4.

A simple page with scripts



Task 4.

Events

- Still using the same page, set up this event:
 - If the user clicks on the button
 - 2. Copy the contents from the input box
 - 3. To the paragraph
 - 4. Then change the paragraph background color to yellow



- No submission is needed for labs
- •What you have done for this lab may be useful for your assignment(s)
- Please keep your own file safely