JQUERY & MORE JAVASCRIPT

Jonathan Cheng

REVIEW

- Define arrays and practice using loops and indexes to access array elements
- Describe arguments as they relate to functions.
- Predict values returned by a given function.
- Differentiate control flow between anonymous and named functions.

CODE ALONG REVIEW

LEARNING OBJECTIVES

- Differentiate between jQuery and JavaScript, describe benefits of using them.
- Recognize jQuery syntax
- Use selectors and jQuery functions to effectively manipulate the DOM

WHAT IS JQUERY?

jQuery is a javascript library, a bunch of javascript code that other developers have written for you to more easily accomplish many common tasks for front end developers.

To take advantage of jQuery, we can add it to our projects just like any other javascript file.

http://jquery.com/download/

WHY USE JQUERY?

JOUERY MAKES JAVASCRIPT EASIER

- Uses css selector syntax
- Less verbose (less typing!)
- Simple animation functions for manipulating DOM Elements
- Modifying CSS uses css style syntax

document.getElementById('button')

becomes

\$('#button')

document.getElementsByTagName('button')

becomes

\$('button')

document.getElementsByClassName('upvotes')

becomes

\$('.upvotes')

document.getElementById('button').style.display = 'none';

becomes

\$('#button').hide();

LET'S REFACTOR

```
//original
document.getElementById("button").onclick = changeColor;
function changeColor(){
  document.getElementById("container").style.backgroundColor = 'red';
//using an anonymous function instead of a named function
document.getElementById("button").onclick = function (){
  document.getElementById("container").style.backgroundColor = 'red';
```

```
//using an anonymous function instead of a named function
document.getElementById("button").onclick = function (){
  document.getElementById("container").style.backgroundColor = 'red';
};
//using jQuery selector and jQuery function to change css
$("#button").click(function(){
  $("#container").css('backgroundColor', 'red');
});
```

THE DIFFERENCE

Plain JavaScript jQuery

154 characters 88 characters

4 lines 3 lines

JQUERY BASICS

```
$(" SELECTOR ")

$("#button") //select id

$(".arrows") //select classes
```

\$("div")

//select tag names

- \$() function is a selector function that uses css selector syntax to return an array of matching dom elements.
- This \$ is the giveaway that you're now using jQuery. The jQuery functions we will see later must act on the jQuery selector above. Plain javascript will not work on jQuery selector objects.

```
click(); $("#button").click(function (){
    //do stuff after clicking the #button
});
```

- create an on click event and tie it to a selection
- > takes an anonymous function to do work once the click event is fired
- Note that click itself is a function so we must finish it with a semi-colon

```
.hide();
```

```
$("#button").hide();
```

- Hides the selected elements
- If multiple elements are selected, it will hide all of them
- Equivalent to calling #button{ display: none; }

```
.show();
```

```
$("#button").show();
```

- Show the selected elements
- If multiple elements are selected, it will show all of them
- If the element had a display value before being hidden, jQuery will remember and restore the original display value (block, inline, or inline-block)

```
.slideUp();
```

```
$("#button").slideUp();
```

- Hide the selected elements using a sliding animation
- If multiple elements are selected, it will hide all of them
- Activating it again will not redo the animation if the element is already hidden

```
.slideDown();
```

```
$("#button").slideDown();
```

- Show the selected elements using a sliding animation
- If multiple elements are selected, it will show all of them
- Activating it again will not redo the animation if the element is already hidden

.slideToggle();

\$("#button").slideToggle();

- If the element is hidden, slide it down and show it
- If the element is visible, slide it up and hide it
- Works like .slideDown() and .slideUp() combined

CODE ALONG TRAFFIC LIGHT

http://codepen.io/spacewaffle/pen/ogagGY

CODE ALONG FAQ

LAB IMAGE CAROUSEL CONTINUED

BONUS

TIMERS

```
//waits 1000ms, then changes the container background to red
window.setTimeout(function(){
  $("#container").css('backgroundColor', 'red');
}, 1000);
//print a message out to the console every 1000ms
window.setTimeout(function(){
 console.log("waiting on stuff...");
}, 1000);
```

FINAL PROJECT

WRAP UP

 Differentiate between jQuery and JavaScript, describe benefits of using them.

- Recognize jQuery syntax
- Use selectors and jQuery functions to effectively manipulate the DOM