

Advanced jQuery

Our Goals

- Events with jQuery
- Animations with jQuery
- Plugins with jQuery
- Chaining with jQuery
- DOM Readiness
- Talk about patterns and anti-patterns

Pure DOM Events

```
var button = document.getElementById( "btn" );

var myButtonCallback = function () {
    console.log( "Button was clicked!" );
};

button.addEventListener( "click", myButtonCallback );
```

jQuery Events

```
// Named Function - my preferred method
var myButtonCallback = function () {
    console.log( "Button was clicked" );
};

$("#btn").on( "click", myButtonCallback );

// Anonymous functions
$("#btn").on("click", function () {
    console.log( "Button was clicked!" );
});
```

There are lots of events!

- Keyboard events
- Mouse events
- Form events
- Browser events

They always look the same!

Keyboard Events

```
var myCallback = function () {};  
  
$("p").on( "keydown", myCallback );  
  
$("p").on( "keypress", myCallback );  
  
$("p").on( "keyup", myCallback );
```

Mouse Events

```
var myCallback = function () {};  
var mySecondCallback = function () {};  
  
$("p").on( "click", myCallback );  
  
$("p").on( "dblclick", myCallback );  
  
$("p").on( "hover", myCallback, mySecondCallback );  
  
$("p").on( "mousemove", myCallback );  
  
$("p").on( "contextmenu", myCallback );
```

Form Events

```
var myCallback = function () {};  
  
$("input").on( "focus", myCallback );  
  
$("input").on( "blur", myCallback );  
  
$("input").on( "change", myCallback );  
  
$("input").on( "select", myCallback );  
  
$("form").on( "submit", myCallback );
```


Browser Events

```
var myCallback = function () {};  
  
$(window).on( "resize", myCallback );  
  
$(window).on( "scroll", myCallback );  
  
$(window).on( "resize", myCallback );
```

Now it is your turn!

It's all about callbacks



The `event` `

An argument gets given to our callbacks for all event listeners! You can call it anything

```
$( "a" ).on("click", function (event) {  
    console.log( event );  
});  
  
var myCallback = function (e) {  
    e.preventDefault();  
};  
  
$( "a" ).on( "click", myCallback );
```

Effects and animations

Lots of cool things!

- `toggle`, `fadeToggle`, and `slideToggle`
- `animate`

```
// $.animate( cssObject, timer, onComplete );  
  
$( "div" ).animate({  
    width: "500px",  
    padding: "15px"  
}, 100, function () {  
    console.log( "Animation complete" );  
});
```

Have a crack at **these**
exercises

jQuery Plugins

jQuery Plugins

// If you want to create an animation, effect, or UI component, chances are pretty good that someone has done the work for you already.

Where do you find jQuery libraries?

- plugins.jquery.com
- javascripting.com

How do you pick them?

- Documented?
- Flexible?
- Responsive community?
- Actively maintained?
- File size?
- Browser support?
- Responsive?

[See here](#) for more information

How do you use them?

- Download the plugin and associated files
- In the HTML reference any associated CSS files (if there are any)
- After jQuery, reference the plugin
- Use the plugin in your code

Have a crack at **these**
exercises

Patterns and Anti-patterns

```
// Patterns //
// Name jQuery selected elements with a $
var $allParagraphs = $("p");

var myCallback = function () {}

// Pass in named functions
// Bind events to the document
$(document).on( "click", "a", myCallback );
```

Chaining

```
$( "p" ).css( "color", "red" );  
$( "p" ).html( "Welcome" );  
$( "p" ).show();
```

// Is the same as...

```
$( "p" ).css( "color", "red" ).html( "Welcome" ).show();
```

// Is the same as...

```
$( "p" ).css( "color", "red" )  
    .html( "Welcome" )  
    .show();
```

```
$( "p" ).animate( {}, 100 ).animate( {}, 100 ).animate( {}, 100 );
```

DOM Readiness

You can't work with HTML if it isn't on the page yet!

```
$(document).ready(function () {  
  
    console.log( "The page is ready" );  
    // All HTML is completely loaded!  
  
});
```

Homework

- Get good at jQuery
 - [Try jQuery](#)
 - [Code Academy: jQuery](#)
 - [Learn jQuery](#)
 - [jQuery Fundamentals](#)

But here is the **project brief**