jQuery Events

Objectives:

— Explain what jQuery events are.

— Name the steps to implement jQuery events.

— Use jQuery events to respond to user interaction.

jQuery events are implementations for the following vanilla javascript events and function much the same way, however, they can be added to the entire collection of elements from the selector

```
document.addEventListener  -> "on" events
document.removeEventListener -> "off"
```

There are 4 key steps to using jQuery for event listening.

Talk & Turn: what do you think they are based on what you know about wiring up jQuery, DOM loading and how vanilla js event listeners work.

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4. add the event handler callback function being mindful of dynamically generated elements

Example in Vanilla JS

```
var paragraphs = document.querySelectorAll('p');

for (var i = 0; i < paragraphs.length; i++) {
  paragraphs[i].addEventListener('click', function() {
    console.log('<p> clicked!');
  });
}
```

Example in jQuery

```
$('p').on('click', function() {
  console.log('<p> clicked and jQuery literally just saved my life!');
});
```

Waiting for your DOM to load.

jQuery provides two ways....

```
// First Way:  $(document).ready()

$(document).ready(function() { $('p').text('Hello world'); });
```

```
// Second Way:  anonymous function passed into the jQuery $ constructor

$(function() {
  $('p').text('Hello world');
});
```

Common event listeners are built for handling clicks and form submits

on click

```
$('p').on('click', function() {
  $(this).toggleClass('active');
});
```

on submit

```
$('form').on('submit' ,function() {
  console.log('Searching...');
});
```

There are even shortcuts for the shortcuts...

```
$('p').click(function() {
  $(this).toggleClass('active');
});

$('form').submit(function() {
  console.log('Searching...');
});
```

Event delegation

Super important Elements that are dynamically added to the DOM need to have a listener on the parent element OR you can add a listener while adding the element (usually less efficient)

Exercise: Create an html file and follow the 4 steps to make the Pokemon example under Event Delegation in the article function correctly. Follow the suggestions on changing the event delegation.

Other common events:

```
on()
off()
hover()

keypress()
keydown()
keyup()

mousedown()
mouseenter()
mouseleave()
```

Let's talk about this. Yes, let's talk about that. By that I mean this.

this

Refers to the context of the outer selection…usually the element that was clicked.

```
$(‘.thing’).click(function(){
  $(this).hide();
});
```

One more thing. Sometimes the default behavior needs to be stopped (such as when submitting a form) This can be done by grabbing the event and using...

```
event.stopPropagation()

event.preventDefault()
```

CFUs

Name the 4 steps to set up jQuery Events

Name as many reasons as you can for why the the following code will not work as expected.
What will it actually do?

```
<!DOCTYPE html>
<html>
  <head>
    <script type="text/javascript">
      $('paragraph').click(console.log('My Click is not working'))
    </script>
  </head>
  <body>
    <p class="paragraph">Click Me</p>
  </body>
</html>
```

Final Exercise make the events work in exercises 00 and 01

`https://github.com/gSchool/jquery-exercises`