FRONT-END WEB DEVELOPMENT

Lesson: jQuery Events

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‣ EVENTS

   ‣ Mouse Events

   ‣ Keyboard Events

   ‣ Form Events

   ‣ Timers

- Events let us build true interaction:

- Take control of what happens when the user clicks and types.

- Make forms more awesome

TYPES OF EVENTS

‣ A full list of available events can be found at:
Mozilla Developer Network

There are a lot of events, for this class we will learn:
- Mouse Events
- Keyboard Events
- Timer Events

HANDLERS

- What is a handler
  - A function to execute when the event is triggered.

MOUSE EVENTS

- click
  - ‣ User has pressed and released the mouse button
- mousedown
  - ‣ Mouse button is pressed over the element
- mouseup
  - ‣ Mouse button is released over the element
- mousemove
  - ‣ user has moved the mouse over the element.

LAB TIME

coa_MouseEvents

MOUSE EVENTS SYNTAX

- ```
$("selector").mouseEvent(handler);
```

# MOUSE POSITION

- All mouse events can return the position of the mouse where the handler was triggered.

  ‣ `event.pageX`
  ‣ `event.pageY`

# PREVENTING DEFAULT EVENT BEHAVIOR

```
$("body").click(function(event) {
  event.preventDefault();
});
```

.ON LET'S YOU DO MULTIPLE AT ONCE

```javascript
$("body").on("mousedown mouseup", function(event) {
  var x = event.pageX;
  var y = event.pageY;
   console.log("Mouse at", x, y);
});
```

FORM EVENTS

- submit
  - ‣ Form has been submitted (user clicked "submit" / pressed return)

- change
  - ‣ The user changed something in the element

- select
  - ‣ User has selected a new choice in an element

- focus
  - ‣ User has placed his cursor on an element or the element is selected

- blur
  - ‣ The element has lost focus (eg. user has clicked somewhere else).

GETTING INFO FROM THE FORM

- This isn't an event, but useful a jQuery method when dealing with forms.
- `$(selector).val();`

KEYBOARD EVENTS

- keydown
  - ‣ Key has been pressed
- keyup
  - ‣ Key has been released
- keypress
  - ‣ Key has been "pressed" (up and down)
- `event.which`
  - ‣ let's us know what key is being pressed
  - ‣ http://asquare.net/javascript/tests/KeyCode.html

LAB TIME

coa_jQuery_Playground_Keyboard_Events

KEYBOARD EVENTS

What is a keycode?
What am I supposed to do with it?

http://jsbin.com/uyorip/2/quiet#k_104

PREVENTING DEFAULT EVENT BEHAVIOR

```javascript
$("form").submit(function(event) {
  event.preventDefault();
  // form will now not POST / redirect
  // so you can use the data!
});
```

TIMER EVENTS

SETTING TIMERS

- Timers let us execute code after a period of time, or over and over again at a set interval.

- `setTimeout(function, delay);`
  ‣ Execute a function after a delay

- `setInterval(function, delay);`
  ‣ Execute a function continuously after a delay

TIMERS - TIMEOUT EXAMPLE

```javascript
function timetest() {
  console.log("1 second has passed!");
}

var timerId = setTimeout(timetest, 1000);
```

STOPPING TIMERS

- When a timer is set, a timer id is returned. We can use this to stop the timer.

- `clearTimeout(id);`
- `clearInterval(id);`

TIMERS – INTERVAL EXAMPLE

```javascript
function timetest() {
  console.log("1 second has passed!");
}

var timerId = setInterval(timetest, 1000);


// Will print forever! We can stop it with:
clearInterval(timerId);
```

LAB TIME

code along Timer

THIS IS WHAT WE ARE GOING TO BUILD

- https://googledrive.com/host/0B7yK_e1LsbdVMjZGeG5ST1BMNWM/index.html