



2024-07-04 14:10

CSCI 165

Introduction to the Internet and the World Wide Web Lecture 6: jQuery



Jetic Gū

Overview

- Focus: Web Development
- Architecture: Internet
- Core Ideas:
 1. What is jQuery?

What is jQuery?



Using Javascript

- Javascript
 - Programming language
 - Interacts with HTML through Events

What is jQuery?

- jQuery is a javascript library
- Before
 - You need to modify your HTML files to invoke Javascript functions
- With jQuery
 - You can leave the HTML page untouched, and manage everything in JS

Getting Started with jQuery

- In the head section of your HTML file, add:

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/  
jquery.min.js"></script>
```

- You see, jQuery is essentially a javascript file. This time, provided by Google.
- You can also download jQuery from [jQuery.com](https://jquery.com) and use that

jQuery Example

Vanilla

- HTML

```
<p onclick="clicked()" >  
  Click me!  
</p>
```

- JS (script.js)

```
clicked = function() {  
  alert("Clicked!");  
}
```

- HTML **With jQuery**

```
<p>  
  Click me!  
</p>
```

- JS (script.js)

```
clicked = function() {  
  alert("Clicked!");  
}  
setup = function() {  
  jQuery('p').click(clicked);  
}  
jQuery(document).ready(setup);
```

jQuery Example

- `jQuery()` is a function
 - `jQuery('p')`
finds all paragraphs on the page (a.k.a selector)
 - `jQuery(...).click(stuff)`
invoke function named `stuff` when selected elements are **clicked**
 - `jQuery(document).ready(setup);`
Setting up all the behaviours after the webpage (document) is fully loaded (ready)
 - `setup`
A function that is called when the document is loaded

With jQuery

- HTML

```
<p>  
    Click me!  
</p>
```

- JS (script.js)

```
setup = function() {  
    jQuery('p').click(clicked);  
}  
jQuery(document).ready(setup);
```


jQuery Example

- `jQuery()` is a function
- `jQuery(document).ready(setup);`
Setting up all the behaviours after the webpage (document) is fully loaded (ready)
- the whole webpage is downloaded
- the whole webpage is drawn on screen
- `document`
A variable (object) referencing the entire webpage, provided by the browser

With jQuery

- HTML

```
<p>  
    Click me!  
</p>
```

- JS (script.js)

```
setup = function() {  
    jQuery('p').click(clicked);  
}  
jQuery(document).ready(setup);
```

jQuery Example

- `jQuery()` is a function
 - `jQuery('p')`
 - finds all paragraphs on the page
 - Same as CSS selector
Can select `id` or `class` as well
 - `jQuery(...).click(stuff)`
 - When selected elements are `clicked`
 - Invoke callable object `stuff`
`stuff()`;

With jQuery

- HTML

```
<p>  
    Click me!  
</p>
```

- JS (script.js)

```
setup = function() {  
    jQuery('p').click(clicked);  
}  
jQuery(document).ready(setup);
```

jQuery Selector

- Selecting a type of element

```
jQuery('p')  
jQuery('div')
```

- Selecting an id

```
jQuery('#block1')  
jQuery('#jetic')
```

- Selecting a class

```
jQuery('.myFood')  
jQuery('.myFood.cheeseBurger')
```

Aside from Clicking

- `.click()` : Clicking Event

```
jQuery('p').click(stuff)
```

- `.html()` : Return/Replace the content

- **Return** existing content

```
old_content = jQuery('p').html()
```

- **Replace** existing content

```
jQuery('p').html('This text will replace the original content')
```

Aside from Clicking

- `.attr()` : Modifying attribute

```
jQuery('img#food').attr('src', 'cheese.png')
```

This will replace the image of `#food` with content from `cheese.png`

- You can change any attribute of an HTML element, including `style` as well