

____Z-blog____

O.R.Manoj Niranthaka. IT17048088

WEDNESDAY, MAY 15, 2019

Client-side development 1 - jQuery

Is jQuery a framework or a library?

The very definition of library and framework in JavaScript is quite inseparable.

By definition, a library is one which helps you write code faster and probably better without affecting your coding style or adding effects.

On the other hand, a framework which helps you write large portion of HTML or actions with small amount of coding. It largely affects your pattern.

Now consider jQuery, it can be library as it's mostly assist your coding without affecting. Or it can be framework as it allows you to write codes to achieve likes of animations, UI toggles, etc

The features provided by jQuery?

1. Effects and animations.
2. Ajax.
3. Extensibility.
4. DOM element selections functions.
5. Events.
6. CSS manipulation.
7. Utilities - such as browser version and the each function.
8. JavaScript Plugins.
9. DOM traversal and modification.
10. Reveal GUI elements

Discuss the advantages and disadvantages of using jQuery in different project scales.

The advantages of jQuery

The main advantage of jQuery is that it is much easier than its competitors. You can add plugins easily, translating this into a substantial time and effort. In fact, one of the main reasons why Resig and his team created jQuery was to buy time (in the web development world).

The open source license of jQuery allows the library to always have constant and fast support, constantly publishing updates. The jQuery team is active and extremely hardworking.

Another advantage of jQuery over its competitors such as Flash and pure CSS is its excellent integration with AJAX.

The disadvantages of jQuery

One of the main disadvantages of jQuery is the large number of published versions in the short time. It does not matter if you are running a new version of jQuery, you will have to host the library yourself (and update it constantly), or download the library from Google (attractive, but with incompatibility problems with the code).

In addition to the problem of the versions, other disadvantages that we can mention:

-jQuery is easy to install and learn, initially. But it's not that easy if we compare it with CSS.

-If jQuery is improperly implemented as a Framework, the development environment can get out of control.

Explain how the jQuery handles the issues related to partial page loads to the browser.

If you must run scripts on a partial view, as is the case when dynamically created content is returned when calling partial views from a controller, you should find that the problem described in the question actually only happens on the initial parent page load. If this is the case, you can solve the problem by NOT loading the partial on the primary view. Instead, you can load the partial view using jQuery AFTER the initial page load.

Discuss the selectors and their use in jQuery.

A jQuery Selector is a function which makes use of expressions to find out matching elements from a DOM based on the given criteria. Say, selectors are used to select one or more HTML elements using jQuery. Once an element is selected then we can perform various operations on the selected element.

Compare and contrast the use of CSS advanced selectors in jQuery and jQuery's DOM traversal API, indicating the pros and cons of them.

CSS advanced selectors in jQuery

Advanced Selectors in CSS. Selectors are used for selecting the HTML elements in the attributes. Some different types of selectors are given below:
Adjacent Sibling Selector: It selects all the elements that are adjacent siblings of specified elements.

jQuery's DOM traversal API

Once you've made an initial selection with jQuery, you can traverse deeper into what was just selected. Traversing can be broken down into parts: parents, children, and siblings. jQuery has an abundance of easy-to-use methods for all these parts. Notice that each of these methods can optionally be passed string selectors, and some can also take another jQuery object in order to filter your selection down.

Explain the importance of DOM objects and DOM processing in jQuery.

The Document Object Model (DOM) is a programming API for HTML and XML documents. It defines the logical structure of documents and the way a document is accessed and manipulated. In the DOM specification, the term "document" is used in the broad sense - increasingly, XML is a way of representing many different kinds of information that may be stored in diverse systems, and much of this would traditionally be represented rather than as documents. Nevertheless, XML presents this data as documents, and the DOM may be used to manage this data.

With the Document Object Model, programmers can create and build documents, navigate their structure, and add, modify, or delete element content. Anything found in an HTML or XML document can be accessed, changed, deleted, or added using the Document Object Model, with some exceptions - in particular, the DOM interfaces for the internal subset and external subset have not yet been specified.

Discuss the benefits of using jQuery event handling over HTML event attributes, providing a list of events supported by jQuery.

jQuery provides simple methods for attaching event handlers to selections. When an event occurs, the provided function is executed. In this function, this refers to the DOM element that initiated the event.

The event handling function can receive an event object. This object can be used to determine the nature of the event, and to prevent the default behavior.

Mouse Events

click

dblclick

mouseenter

mouseleave

Keyboard Events

keypress

keydown

keyup

Form Events

submit

change

focus

blur

Document/Window Events

load

resize

scroll

unload

Explain how to declare jQuery event handlers outside the `$(document).ready()` function, indicating the need for that, and the related issues and solutions.

A page can't be manipulated safely until the document is "ready." jQuery detects this state of readiness for you. Code included inside `$(document).ready()` will only run once the page Document Object Model (DOM) is ready for JavaScript code to execute. Code included inside `$(window).load()` will run once the entire page (images or iframes), not just the DOM, is ready.

```
// A $( document ).ready() block.
```

```
$( document ).ready(function() {  
  
    console.log( "ready!" );  
  
});
```

Experienced developers sometimes use the shorthand `$()` for `$(document).ready()`. If you are writing code that people who aren't experienced with jQuery may see, it's best to use the long form.

```
// Shorthand for $( document ).ready()
```

```
$(function() {  
  
    console.log( "ready!" );  
  
});
```

You can also pass a named function to `$(document).ready()` instead of passing an anonymous function.

```
// Passing a named function instead of an anonymous function.
```

```
function readyFn( jQuery ) {  
  
    // Code to run when the document is ready.  
  
}
```

```
$( document ).ready( readyFn );
```

```
// or:
```

```
$( window ).on( "load", readyFn );
```

Identify a list of advanced features provided by jQuery and explain their use towards improving the user experience.

The jQuery library contains the following features:

-HTML/DOM manipulation

-CSS manipulation

-HTML event method

-Effects and animations

-AJAX

-Utilities

Posted by **ManojNiranthaka** at **8:05 AM**



No comments:

Post a Comment

Enter your comment...



Comment as: **ManojNiranthaka** ▼

Publish

Preview

Home

Subscribe to: **Post Comments (Atom)**

ABOUT ME



ManojNiranthaka

[View my complete profile](#)

BLOG ARCHIVE

▼ 2019 (7)

▼ May (1)

Client-side development 1 - jQuery

► March (3)

► February (3)



Picture Window theme. Theme images by richcano. Powered by Blogger.