

jQuery



Sreenath H B
+91 988 646 5897
mail@sreenath.net
<http://sreenath.net>

jQuery Overview

- What is jQuery actually?
- How browsers see HTML
- JSON Overview
- Downloading jQuery
- Including jQuery in your pages
- Hello World

Selectors – The Heart of jQuery

- Element Selector
\$(“element”)
- ID Selector
\$(“#id”)
- Class Selector
\$(“.classname”)
- Ancestor Descendant
\$(“E F”)
- Parent Child
\$(“E > F”)
- Siblings – Adjacent & General
Adjacent Sibling : \$(“E + F”)
General Siblings : \$(“E ~ F”);
- Multiple Selectors
\$(“E, F, G”)

Selectors Contd..

- `:first-child`, `:last-child`, `:only-child` `:nth-child(n)`

 - `$(“li:first-child”);`

 - `$(“tr:last-child”);`

 - `$(“img:only-child”);`

 - `$(“tr:nth-child(2n)”);`

- **Attribute Selectors**

 - Has Attribute: `$(“img[alt]”);`

 - Begins With: `$(“a[href^=mailto:]”);`

 - Ends With: `$(“a[href$=.pdf]”);`

 - Contains: `$(“a[href*=microsoft]”);`

 - Equals: `$(“:checkbox[checked=true]”)`

- `:not(s)`, `:empty`, `:eq(n)`, `:contains(s)`

- `:even`, `:odd`

jQuery Tid-Bits

- The jQuery Object
- Looping with each();
- this
- Chaining
- Closures
- Accessing DOM Objects
 - Array Subscript – Unsafe
 - .get(n)
- Making peace with other libraries – noConflict()
- Caching for performance

DOM Traversal

- `.filter()`
- `.siblings()`
- `.parent()`, `.children()`, `.parents()`
- `.next()`, `.nextAll()`, `.prev()`, `.prevAll()`, `.andSelf()`
- `.find()`

Manipulating Styles

- `.addClass()`
- `.removeClass()`
- `.css("height", "35px")`

Events

- Unobtrusive Programming
- Capturing vs. Bubbling; StopPropagation, preventDefault
- The Universal Page Load
- Binding Events to Elements, Triggering Events via Code
- Shorthands
 - Blur, focus, select
 - Change
 - Click, Dblclick
 - Mousedown, mouseup, mouseover, mouseout, mousemove
 - Keyup, keydown, keypress
 - Select
- Event Handler Context
- Passing additional parameters to events
- Compound Events
 - Toggle, Hover
- Live, Die & Delegate!

Effects & Animations

- Hide, Show
- fadeIn, fadeOut
- Toggle
- slideUp, slideDown
- slideToggle
- .animate()

Working with Forms

■ Form Selectors

- :text
- :checkbox
- :radio
- :image
- :submit
- :reset
- :password
- :file
- :input
- :button
- :enabled
- :disabled
- :checked
- :selected

DOM Manipulation

- `.text()`
- `.html()`
- `.val()`
- `.append()`, `prepend()`
- `.remove()`
- `.empty()`
- `.attr()`, `.removeAttr()`
- `addClass()`, `removeClass()`
- Creating DOM Nodes
- `insertAfter`, `after`, `insertBefore`, `before`
- `prependTo`, `appendTo`
- `.wrap()`

AJAX

- `.load("a.html")`
- `.getJSON("b.json");`
- `.get("c.xml");`
- `.post("d.php");`
- `.ajax({`
 - `url:""`,
 - `type:"GET"`,
 - `dataType: "html"`,
 - `success: function(data){`
 - `}`,
 - `error: function(xhr){`
 - `}`

Authoring Plugins

```
(function($){  
    $.fn.myPlugin = function(options){  
        var defaults = { };  
        options = $.extend(defaults, options);  
  
        return this.each(function(){  
            //My Code for selected elements  
        });  
    }  
})(jQuery);
```

//Calling

```
$(“selector”).myPlugin({options})
```

jQuery Best Practices – Tips & Tricks

- Select directly using an ID selector where possible
- Cache objects if using repeatedly
- Chain as long as possible
- Reduce Direct DOM Manipulation
- Be wary of selectors in loops or each()
- Leverage Event Delegation where possible
- Defer loading to window.load
- Don't use jQuery where its not needed!
- Conditionally loading jQuery locally

References

- Dive Into Accessibility
 - <http://diveintoaccessibility.org/>
- Dive into HTML5
 - <http://diveintohtml5.org/>
- Books
 - Pro JavaScript Design Patterns by Dustin Diaz
 - Object Oriented JavaScript by Stoyan Stefanov
 - Advanced JavaScript 3rd Ed by Chuck Easttom
 - Learning jQuery 1.3