jQuery for Beginners

write less, do more.

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http://www.meetup.com/Online-Technology-User-Group/events/86938772/

It's me!

- Application Developer
- Technical Consultant
- Process Mentor

jQuery
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It's about you!

Web(Site) Developer &

Tasted JavaScript

Expectations

- Introduction
- JavaScript & jQuery
- Basic features
- Few static examples
- Not a tutorial
- Not a reference guide

My Bodhi Tree Moment

Simple JS Date Object (Case 01)

```
var d = Date.parse("Wed Jun 25 12:05:12 +0000 2012");
document.write(d);
```

1277467512000   1277467512000   NaN

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Simple JS Date Object (Case 02)

```
var d = new Date("04-02-2012");
document.write(d);
```

 Wed Apr 02 2012 00:00:00 GMT+0530 (India Standard Time)
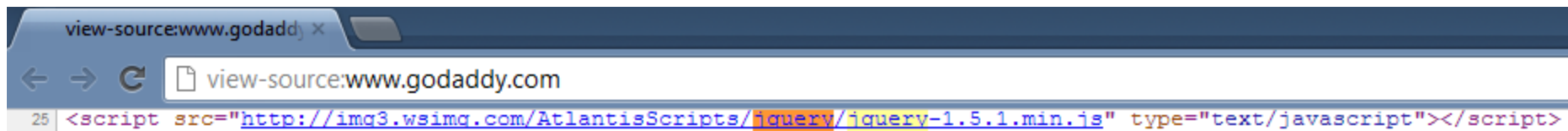
 Wed Apr 2 00:00:00 UTC+0530 2012

 Invalid Date

jQuery = JavaScript

jQuery > JavaScript

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```
view-source:www.godaddy ×

← → C | view-source:www.godaddy.com

25 <script src="http://img3.wsimg.com/AtlantisScripts/jquery/jquery-1.5.1.min.js" type="text/javascript"></script>
```

jQuery History (Events)

- Barcamp NYC
- 2006 (Version 1.0)
- Current Version 1.8.2
- Others

jQuery History (Founder)

John Resig

processing.js too

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jQuery Download Formats

Who uses jQuery?

55 %

http://docs.jquery.com/Sites_Using_jQuery

Why jQuery?

- Cross Browser Support
- Multi-Language Support
- Works with Microsoft Tools
- Awesome AJAX Support
- Easy CSS Integration
- Easy to learn and adopt

Benefits of jQuery

- Write less, do more.

- Deadlines

- Keeps the code simple

- Extensible & Lots of plugins

Does jQuery is faster than javascript?

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Do NOT use jQuery

- About Page
- Info Pages
- Very less JS Actions

Lets Begin!

Download & include

```
<head>
    <title>jQuery Example</title>
    <script src="jquery.min.js" type="text/javascript"></script>
</head>
```

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Use it from Online

```
<head>
    <title>jQuery Example</title>
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.8.2/jquery.min.js"></script>
</head>
```

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Let's Test!

```
$("document").ready(function () {
    alert("Document is Ready");
});
```

3 Examples

Just make it invisible!

```
//javascript
document.getElementById('textbox').style.display = "none";

//jQuery
$('#textbox').hide();
```

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Create a <h1> tag

```javascript
//javascript
var h1 = document.createElement("h1");
h1.innerHTML = "My Text";
document.getElementsByTagName('body')[0].appendChild(h1);

//jQuery
$('body').append( $('<h1/>').html("My Text") );
```

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Add "myClass" class to <div> child of <a>

```javascript
//javascript
var links = document.getElementsByTagName('a');
var link;
for (i=0;i<links.length;i++) {
  link =  links[i];
   for (j=0;j<link.children.length;j++) {
      if (link.children[j].tagName === "DIV") {
         var currentClassName = link.children[j].className;
         var newClassName;
         if (currentClass === "")
            newClassName = "newClass";
         else
            newClassName = currentClassName + " myClass";
         link.children[j].className = newClassName;
      }
   }
}

//jQuery
$('a > div').addClass("myClass");
```

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Selectors

- Select DOM Elements
- Single (or) Array
- jQuery Objects

Basic Selectors

- Tag Name
- Tag ID
- Tag Class

Tag Name

`document.getElementsByTagName(`*`tagName`*`)`

Syntax: $("tagName")

Examples:

- $("div")
- $("p")
- $("h1")
- $("input")

Tag ID

`document.getElementById("id")`

Examples:

Syntax: $("#tagId")

- $("#firstName")
- $("#lastName")

Tag Class

`document.getElementsByClassName("className")`

Examples:

Syntax: $(".className")

- $(".source")
- $(".comment")

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All Elements in a Page

$("*")

Let's Combine

Syntax:

$("tagName.className")
$("tagName#tagId.className")

Examples:

$("h1.title")
$("h1#heading2.title")

Advanced Selectors

- Combination of Selectors
- Hierarchical
- Order

Advanced Selectors

- $("selector1, selector2,...")
- $(".class1, .class2,...")
- $(" ancestor descendant")
- $(" parent > child")
- $(" previous + next")
- $(" previous ~ siblings")

Filters

- Always used with Selectors
- Filter/Restrict the Selector results
- CSS Style Conditions

Basic Filters

- Mostly used with Index
- Tag Specific Conditions

Index Filters

Syntax:

- $("Selector:first")
- $("Selector:last")

- $("Selector:odd")
- $("Selector:even")

- $("Selector:gt(i)")
- $("Selector:lt(i)")
- $("Selector:eq(i)")

Examples:

- $("p:first")
- $("p:last")

- $("div:odd")
- $("div:even")

- $("input:gt(i)")
- $("input:lt(i)")
- $("input:eq(i)")

Condition Filters

Syntax:

- $("Selector:visible")

- $("Selector:hidden")

- $("Selector:enabled")

- $("Selector:disabled")

Condition Filters

Syntax:

- $("Selector:checked")
- $("Selector:selected")

Condition Filters

Syntax:

- $("Selector:header")

- $("Selector:animated")

- $("Selector:not(Selector:not)")

Relationship Filters

Syntax:

- $("Selector:parent")

- $("Selector:first-child")

- $("Selector:last-child")

Form Filters

Syntax:

- $("Selector:input")

- $("Selector:text")

- $("Selector:password")

Form Filters

Syntax:

- $("Selector:radio")
- $("Selector:checkbox")

- $("Selector:submit")
- $("Selector:reset")

Form Filters

Syntax:

- $("Selector:image")
- $("Selector:file")
- $("Selector:button")

You can combine filters!

Syntax:

- $("Selector:filter1:filter2")

Example:

- $("form :text:enabled")

Attributes

- [Selector + Filter] Results
  - Filter & Retrieve Attribute(s)
  - Set Attribute(s)
  - Change Attribute(s)

Filter Attributes

Syntax:

- $("[attribute]")
- $("[attribute1] [attribute2]….")

- $("[attribute=value]")
- $("[attribute!=value]")

Filter Attributes

Syntax:

- $("[attribute^=value]")
- $("[attribute$=value]")
- $("[attribute*=value]")

Retrieve Attributes

Syntax:

- $("Selector").attr(name)

Example:

- $("img").attr("src")

Set Attributes – Type 01

Syntax:

- $("Selector").attr(key, value)

Example:

- $("p").attr("class", "source");

Set Attributes – Type 02

Syntax:

- $("Selector").attr(key, function())

Example:

- $("img").attr("alt", calculateAlt());

Set Attributes – Type 03

Syntax:

- $("Selector").attr(properties)

Example:

- $("img").attr({

    "src" : "/path/pic.jpg,

    "title" : "My Title"

  });

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Remove Attributes

Syntax:

- $("Selector").removeAttr(name)

Example:

- $("div"). removeAttr("class")

Class Specific Attributes

Syntax:

- $("Selector").hasClass(className)
- $("Selector").removeClass(className)
- $("Selector").toggleClass(className)

HTML Specific Attributes

Syntax:

- $("Selector").html()
- $("Selector").html("html code")

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Text Specific Attributes

Syntax:

- $("Selector").text()
- $("Selector").text("text content")

Value Specific Attributes

Syntax:

- $("Selector").val()
- $("Selector").val("value")

Traversing

- length (or) size()
- get()
- get(index)
- find()
- each()

Traversing – length/size

Syntax:

- $("Selector").length)
- $("Selector").size())

Examples:

- $("h1").length)
- $("div").size())

Traversing – get

Syntax:

- $("Selector").get())
- $("Selector").get(index))

Examples:

- var h1_list = $("h1").get())
- var h1 = $("h1").get(2))

Traversing – find

Syntax:

- $("Selector").find("Selector"))

Examples:

- $("select").find("option[value*="js"]"))

Traversing – each

Syntax:

```
$("Selector").each(function(){
        // $(this).xxxxx()
        }));
```

Example:

```
var border = 1;
$("div").each( function() {
        $(this).css("border", border+"px  solid blue");
        border++;
});
```

Basic Events

- bind()
- unbind()
- ready()
- toggle()
- hover()
- trigger()

Basic Events - bind

Syntax:

- $("Selector").bind(event, data, handler))
- $("Selector").unbind(event, handler))

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Basic Events - bind

Example:

```
$(function() {
        $("#myButton").bind("onclick", validate)
});

function validate() {
        if($("#myText").val().length == 0)
                alert("Error Text");
        else
                submit();
}
```

Basic Animations

- show()
- hide()
- fadeIn()
- fadeOut()
- slideDown()
- slideUp()

Basic Animations – show/hide

Syntax:

- $("Selector").show(speed)

- $("Selector").hide(speed)

Speed:

- slow

- normal

- fast

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Basic Animations – show/hide

Example:

```
$("#showButton"). click(function () {
    $("#mydiv").show(slow);
});
```

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Plug-ins

- jQuery Themes
- jQuery UI Libraries
  - Interactions
  - Widgets
  - Effects

jQuery Themes

http://themeroller.com

Interactions UI Libraries

- Draggable
- Droppable
- Resizable
- Selectable
- Sortable

Widgets UI Libraries

- Tabs

- Date Picker

- Progress bar

- Slider

- Dialog

- Accordion

Effects UI Libraries

- show/hide/toggle

- add/remove/toggle class

- Color related Animations

AJAX

- Awesome APIs
- GET/POST
- Event handlers
- JSON Support

Other JS Frameworks

- AccDC
- AJS
- Ample SDK
- CupQ
- DHTMLX
- **Dojo**
- Echo3
- Enyo
- **Ext JS**
- **Google Web Toolkit**
- midori
- **MochiKit**

- MooTools
- **Prototype**
- **script.aculo.us**
- Pyjamas
- qooxdoo
- Rialto Toolkit
- Rico
- SmartClient & SmartGWT
- SweetDEV RIA
- Wakanda
- **YUI**
- ZK

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Demo

Thank You!

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References

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