# 6일차. jQuery 소개



## 주요 JS 라이브러리

- jQuery
  - <a href="http://jquery.com">http://jquery.com</a>
  - 가장 많이 쓰이는 JS 라이브러리
- Modernizr
  - <a href="http://modernizr.com">http://modernizr.com</a>
  - HTML5 기본 속성들의 호환성을 보완하는 라이브러리
- Raphaël
  - http://rafaeljs.com
  - 자바스크립트를 통한 그래픽 라이브러리
- Sencha
  - http://sencha.com
  - Ext JS + jQTouch + Raphaël

## **JQuery**

- 가장 강력한 자바스크립트 라이브러리
  - 간단한 자바스크립트 작업 수행

#### ■ 문서 객체 처리 기능

- 웹 문서 내 객체 접근
  - CSS나 Xpath 같은 직관적 방법
- 웹 문서 내 객체를 쉽게 변경 가능
- 웹 문서 내 사용자 액션을 변경 가능

#### ■ 다양한 기능 제공

- 애니메이션 기능 추가 가능
- Ajax 기능 사용 가능
- 브라우저 호환성 유지



## jQuery의 장점

- 작은 용량- 14kb (Minified and Gzipped)
- ■웹 브라우저 지원 (IE 6.0+, FF 1.5+, Safari 2.0+, Opera 9.0+)
- CSS 같은 문법 방식 누구나 이해하기 쉽다!
- 강력한 개발자 커뮤니티
- 확장 기능 제공 플러그인

## jQuery 사용처

- 35% of all sites that use JavaScript, use jQuery
- 1 out 5 sites, of all sites, use jQuery

reddit\_com
espn\_com
ibm\_com
stackoverflow\_com
kickball\_com
boxee\_tv
bit\_ly
twitpic\_com

whitehouse gov wikipedia org microsoft com amazon com netflix com bing com monster com tv.com overstock.com
time.com
capitalone.com
usatoday.com
ning.com
wordpress.com
dell.com
twitter.com

## jQuery의 기초

### 동작 실행

\$('#menu').addClass('hello')

#### 객체 선택

- 효율적 문서 객체 선택
  - \$() function jQuery 객체를 만드는 기본 메소드
  - \$("dt")는 문서에 \dt \ 요소를 만드는 방법
- 쉬운 객체 동작 제어
  - \$().addAction()으로 동작 추가
  - \$('img.photo').attr('src','/default.png');

```
<html>
   <head>
       <script type="text/javascript" src="jquery.js"></script>
       <script type="text/javascript">
               $(document).ready(function() {
                      $('a').addClass('link');
                });
       </script>
   </head>
   <body>
   <a href="http://jquery.com/">jQuery</a>
   </body>
   </html>
```

```
<div id="head>
<h1 id='heading'>Cities of the World</h1>
<dl>
<dt>Paris</dt>
<dd>Chic, fashionable, expensive rude</dd>
<dt>Sydney</dt> <dd>Opera house but no culture, Mardi Gras, fireworks</dd>
</dl>
</dl>
</dl>
</dl>
</dl>
```

```
h1 {font-size: 2.5em; margin-bottom:
    0;}

.emphasize {font-style: italic;
    color:red;}
```

#### Cities of the World

Paris

Chic, fashionable, expensive rude Sydney

Opera house but no culture, Mardi Gras, fireworks

DOM

```
$('div#head h1');
```

CSS

```
$('dt').addClass('emphasize');
```

## jQuery 선택자

#### CSS

- #id ID
- .class 클래스
- p.class 요소속 클래스
- pa 자식 요소
- p > a 자식 직접 선택

#### XPath

- /html/body//div DOM 상속 경로
- a[@href] href 속성을 가진 a 요소
- div[ol] ol 요소를 가진 div 요소
- //a[@ref='nofollow'] ref를 가진 모든 a 요소

#### ■필터

- p:first 첫번째 자식

- li:last 마지막 자식

- a:nth(3) 네번째 링크

- a:eq(3)

- p:even or p:odd 홀짝수

- a:gt(3) or a:lt(4) 3보다 크거나 4보다 작은 경우

- a:contains('click') click이라는 글자 포함한 경우

## **JQuery Filters**

#### 필터

- p:first 첫번째 자식

- li:last 마지막 자식

- a:nth(3) 네번째 링크

- a:eq(3)

– p:even or p:odd 홀짝수

- a:gt(3) or a:lt(4) 3보다 크거나 4보다 작은 경우

- a:contains('click') click이라는 글자 포함한 경우

```
<!DOCTYPE html>
<html>
<body>
  ul id="nav">
     <a>home</a>
     <a>about</a>
  <script src="jquery.js"></script>
<script>
  jQuery("#nav li");
</script>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
<body>
  <a>home</a>
    <a>about</a>
  <script src="jquery.js"></script>
<script>
  jQuery("#nav li").addClass("navLiItem");
</script>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
<body>
  ul id="nav">
     <a>home</a>
     <a>about</a>
  <script src="jquery.js"></script>
<script>
  jQuery("#nav a");
</script>
</body>
</html>
```

```
<!DOCTYPE html>
<html>
<body>
   ul id="nav">
      <a href="/home">home</a>
      <a href="/about">about</a>
   <script src="jquery.js"></script>
<script>
   jQuery("#nav a").each(function(){
      jQuery(this).attr("href", "/" + jQuery(this).text());
   });
</script>
</body>
</html>
```

## 개념 2. Create something, do something

```
<!DOCTYPE html>
<html>
<body>
ul id="nav">
<script src="jquery.js"></script>
<script>
  jQuery("home");
  jQuery("about");
</script>
</body>
</html>
```

# 개념 2. Create something, do something

```
<!DOCTYPE html>
<html>
<body>
ul id="nav">
<script src="jquery.js"></script>
<script>
  jQuery("home").wrapInner("a");
  jQuery("about").wrapInner("a");
</script>
</body>
</html>
```

## 개념 2. Create something, do something

```
<!DOCTYPE html>
<html>
<body>
ul id="nav">
  <a>home</a>
  <a>about</a>
<script src="jquery.js"></script>
<script>
  jQuery("home").wrapInner("a").appendTo("#nav");
   jQuery("about").wrapInner("a").appendTo("#nav");
</script>
</body>
</html>
```

## 개념 3. Chaining

```
<!DOCTYPE html>
<html>
<body>
  <a href="/home">home</a>
     <a href="/about">about</a>
  <script src="jquery.js"></script>
<script>
  jQuery("ul").attr("id","nav");
  jQuery("#nav li").addClass("navLiItem");
  jQuery("#nav a").each(function(){
     jQuery(this).attr("href", "/" + jQuery(this).text());
  });
</script>
</body>
</html>
```

## 개념 3. Chaining

```
<!DOCTYPE html>
<html>
<body>
  <a href="/home">home</a>
     <a href="/about">about</a>
  <script src="jquery.js"></script>
<script>
  jQuery("ul").attr("id","nav")
  .find("li").addClass("navLiItem")
  .find("a").each(function(){
     jQuery(this).attr("href","/" + jQuery(this).text());
  });
</script>
</body>
</html>
```

## 개념 4. jQuery parameter types

CSS Selectors & custom CSS expressions

```
jQuery("#nav") and jQuery(":first")
```

HTML

```
jQuery("<a href="#">link</a>")
```

DOM Elements

```
jQuery(document) or jQuery(this) or jQuery(event.target)
```

A function (shortcut for jQuery DOM ready event)

```
jQuery(function(){}) = jQuery(document).ready(function(){})
```

### 사용법 1: 값 선택

■ 원하는 속성 값 선택

```
var height = $('div#intro').height();
var src = $('img.photo').attr('src');
var lastP = $('p:last').html()
```

#### DOM 선택

```
$('div.section').next()
$('div.section').prev()
$('div.section').prev('a')
$('div.section').parent()
$('div.section').parents()
```

### 사용법 2: 객체 속성 변경

HTML attribute 변경 \$('img.photo').attr('src', '/default.png') ■ HTML 문법 추가(innerHTML) \$('a.foo').html('<em>Click me now!</em>'); CSS class 추가 \$('div.section').addClass('highlighted'); CSS property 변경 \$('p:odd').css('color', '#ccc');

### 사용법 3: 동작 추가

자동 루프
\$('div').hide();

var divs = document.getElementByTagName('div');
for(var i=0; i<divs.length;i++) {
 divs[i].style.display = 'none';
}

■ 연속적인 동작 실행 가능

```
$('div.section').hide().addClass('gone');
$('div.section').html(function(i){
  return 'value' + i + '';});
```

## jQuery API 개요

- Core
- Selectors
- Attributes
- Traversing
- Manipulation
- **CSS**
- Events
- Effects
- Ajax
- Utilities

- Core
- Selectors
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```
jQuery()
each()
map()
size()
length
selector
context
index()
get()
```

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```
<!DOCTYPE html>
<html>
<body>
Gold
Silver
<script
src="http://ajax.googleapis.com/ajax/
libs/jquery/1.3.2/jquery.min.js"></sc</pre>
ript>
<script>
alert(jQuery("p").map(function() {
    return $(this).text();
}).get());
</script>
</body>
                           http://jsbin.com/orani/edit#html
</html>
```

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```
jQuery("#nav li.contact")
jQuery(":visible")
jQuery(":radio:enabled:checked")
jQuery("a[title]")
jQuery("a[title][href='foo']")
jQuery("a:first[href*='foo']")
jQuery("#header, #footer")
iQuery("#header, #footer").filter(":visible")
```

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```
attr()
removeAttr()

addClass()
hasClass()
toggleClass()
removeClass()
```

```
<!DOCTYPE html><html><body>
<input type="text" value="search" />
<script src="jquery.js"></script>
<script>
$("input").focus(function(){
 var v = \$(this).val();
  $(this).val( v == this.defaultValue ? "" : v);
}).blur(function(){
 var v = \$(this).val();
  $(this).val( !v ? this.defaultValue : v);
});
</script></body></html>
                                                   http://jsbin.com/ihale/edit#html
```

- Core
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```
add()
                       eq()
children()
                       filter()
closest()
                       is()
find()
                      not()
next()
                       slice()
nextAll()
prev()
prevAll()
siblings()
parent()
parents()
andSelf()
end()
```

- Core
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```
<!DOCTYPE html>
<html>
<body>
<h3>Quotes</h3>
< div>
    Now or never
    Because he could
</div>
<script src="jquery.js"></script>
<script>
$("h3").click(function() {
   $(this).next().toggle();
}).next().hide();
</script>
</body>
                           http://jsbin.com/uhole/edit#html
</html>
```

- Core
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```
html()
                     replaceWith()
text()
                     replaceAll()
append()
                     empty()
appendTo()
                     remove()
prepend()
prependTo()
                     clone()
after()
insertAfter()
before()
insertBefore()
wrap()
wrapAll()
wrapInner()
```

- Core
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```
<!DOCTYPE html>
<html>
<body>
Make me bold!
<script src="jquery.js"></script>
<script>
jQuery("p").wrapInner("<b></b>");
</script>
</body>
</html>
```

http://jsbin.com/esuwu/edit#html

- Core
- Selectors
- Attributes
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- CSS-
- Events
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```
css()
offset()
offsetParent()
postion()
scrollTop()
scrollLeft()
height()
width()
innerHeight()
innerWidth()
outerHeight()
outerWidth()
```

- Core
- Selectors
- Attributes
- Traversing
- Manipulation
- CSS -
- Events
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```
<!DOCTYPE html>
<html>
<head>
<style>div{background-color:#ccc; width:100px;
margin:0 20px; float:left;}</style>
</head>
<body>
<div></div>
<div></div>
<div></div>
<script src="jquery.js" ></script>
<script>
jQuery("div").height(jQuery(document).height());
</script>
</body>
</html>
                                    http://jsbin.com/iseti/edit#html
```

- Core
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```
ready()
                          blur()
                           change()
bind()
                           click()
one()
                           dbclick()
trigger()
                           error()
triggerHandler()
                           focus()
unbind()
                          keydown()
                          keypress()
live()
                          keyup()
die()
                          mousedown()
                           mousenter()
hover()
                           mouseleave()
toggle()
                          mouseout()
                          mouseup()
                           resize()
                           scroll()
                           select()
                           submit()
                           unload()
```

- Core
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```
<!DOCTYPE html>
<html>
<body>
click me
click me
<script src="jquery.js"></script>
<script>
jQuery("p").bind("click", function(){
     $(this).after("click me");
});
</script>
</body>
</html>
```

http://jsbin.com/ehuki/edit#html

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```
<!DOCTYPE html>
<html>
<body>
click me
click me
<script src="jquery.js"></script>
<script>
jQuery("p").live("click", function(){
     $(this).after("click me");
});
</script>
</body>
</html>
```

http://jsbin.com/epeha/edit#html

- Core
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```
show()
hide()
toggle()
slideDown()
slideUp()
slideToggle()
fadeIn()
fadeOut()
fadeTo()
animate()
stop()
```

```
var tooltip = $("<div/>")
.addClass("tooltip")
.appendTo("body");
$("input").mouseover(function(event) {
   tooltip.text(this.title).css({
      left: event.pageX,
      top: event.pageY
   }).fadeIn();
}).mouseout(function() {
   tooltip.fadeOut();
```

http://jsbin.com/enoco3/edit#html

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```
<!DOCTYPE html><html><head>
<style>
div{background-
color:#bca;width:100px;border:1px solid green;}
</style>
</head>
<body>
<div id="block">Hello!</div>
<script
src="http://ajax.googleapis.com/ajax/libs/jquer
y/1.3.2/jquery.min.js" ></script>
<script>
jQuery("#block").animate({
    width: "70%",
    opacity: 0.4,
}, 1500);
</script></body></html>
```

http://jsbin.com/ulexu/edit#html

- Core
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```
jQuery.ajax()
                       jQuery.ajaxSetup()
                       serialize()
jQuery.get()
                       serializeArray()
jQuery.getJSON()
jQuery,getScript()
jQuery.post()
load()
ajaxComplete()
ajaxError()
ajaxSend()
ajaxStart()
ajaxStop()
ajaxSuccess()
```

```
<!DOCTYPE html><html><body>
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jq
uery.min.js" ></script>
<script>
jQuery.getJSON("http://api.flickr.com/services/feeds/phot
os_public.gne?tags=jquery&tagmode=all&format=json&jsoncal
lback=?",
function(data){
    jQuery.each(data.items, function(i,item){
        jQuery("<imq/>")
        .attr("src", item.media.m)
        .appendTo("body");
        if ( i == 30 ) return false;
    });
</script></body></html>
                                               http://jsbin.com/ivifa/edit#html
```

- Core
- Selectors
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```
jQuery.support
                       jQuery.trim()
jQuery.boxModel
                       jQuery.param()
jQuery.each(),
jQuery.extend(),
jQuery.grep(),
jQuery.makeArray(),
jQuery.map(),
jQuery.inArray(),
jQuery.merge(),
jQuery.unique()
jQuery.isArray(),
jQuery,isFunction()
```

## Overview of jQuery API

- Core
- Selectors
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```
// returns "hello"
jQuery.trim(" hello ");

//
returns "name=John&url=ejohn.org"
jQuery.param({ name: "John",
url: "ejohn.org" });
```

### 플러그인 만들기

#### Step 1 create a private scope for \$ alias

```
<!DOCTYPE html><html><body>
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
})(jQuery);
</script></body></html>
```

#### Step 2 attach plugin to fn alias (aka prototype)

```
<!DOCTYPE html><html><body>
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
    $.fn.loveNotHate = function(){
    $(this).text($(this).text().replace(/hate/g,"love"));
    };
})(jQuery);
</script></body></html>
```

#### Step 2 attach plugin to fn alias (aka prototype)

```
<!DOCTYPE html><html><body>
I hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
    $.fn.loveNotHate = function(){
    $(this).text($(this).text().replace(/hate/g,"love"));
    };
})(jQuery);
jQuery("p").loveNotHate();
</script></body></html>
```

#### Step 3. add implicit iteration

```
<!DOCTYPE html><html><body>
I hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.is"></script>
<script>
(function($){
   $.fn.loveNotHate = function(){
       this.each(function(){
           $(this).text($(this).text().replace(/hate/q,"love"));
       });
})(jQuery);
jQuery("p").loveNotHate();
</script></body></html>
```

#### Step 3. add implicit iteration

```
<!DOCTYPE html><html><body>
I hate jQuery!
I mean really hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
   $.fn.loveNotHate = function(){
       this.each(function(){
           $(this).text($(this).text().replace(/hate/g,"love"));
       });
})(jQuery);
jQuery("p").loveNotHate();
</script></body></html>
```

#### Step 4 enable chaining

```
<!DOCTYPE html><html><body>
I hate jQuery!
I mean really hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
   $.fn.loveNotHate = function(){
       return this.each(function(){
           $(this).text($(this).text().replace(/hate/q,"love"));
       });
})(jQuery);
jQuery("p").loveNotHate();
</script></body></html>
```

#### Step 4. enable chaining

```
<!DOCTYPE html><html><body>
I hate jQuery!
I mean really hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
   $.fn.loveNotHate = function(){
       return this.each(function(){
           $(this).text($(this).text().replace(/hate/q,"love"));
       });
})(jQuery);
jQuery("p").loveNotHate().hide();
</script></body></html>
```

#### Step 5. add default options

```
<!DOCTYPE html><html><body>
I hate jOuery!
I mean really hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
   $.fn.loveNotHate = function(){
       return this.each(function(){
           $(this).text($(this).text().replace(/hate/g,$.fn.loveN
           otHate.defaults.text));
       });
   $.fn.loveNotHate.defaults = {text:"love"};
})(jOuery);
jQuery("p").loveNotHate();
</script></body></html>
                                               http://jsbin.com/asice/edit
```

```
<!DOCTYPE html><html><body>
I hate jOuery!
I mean really hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
   $.fn.loveNotHate = function(){
       return this.each(function(){
           $(this).text($(this).text().replace(/hate/g,$.fn.loveN
           otHate.defaults.text));
       });
   $.fn.loveNotHate.defaults = {text:"love"};
})(jOuery);
jQuery("p").loveNotHate({text:"love-love-love"});
</script></body></html>
                                               http://jsbin.com/asice/edit
```

```
<!DOCTYPE html><html><body>
I hate jQuery!
I mean really hate jQuery!
<script
src="http://ajax.googleapis.com/ajax/libs/jquery/1.3.2/jquery.min
.js"></script>
<script>
(function($){
   $.fn.loveNotHate = function(options){
       return this.each(function(){
           $(this).text($(this).text().replace(/hate/q,$.fn.loveN
           otHate.defaults.text));
       });
   };
   $.fn.loveNotHate.defaults = {text:"love"};
})(jQuery);
jQuery("p").loveNotHate({text:"love-love-love"});
</script></body></html>
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       return this.each(function(){
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# 실습 내용: jQuery Playground

http://code.google.com/apis/ajax/playground/#jquery

Google code Code Playground

Pick an API

± Language

Blogger Blog Search Book Search

Calendar **Earth** New Samples!

**⊕ Feeds New Samples!** 

**⊕** Image Search

Javascript

□ Libraries

iQuery

Dojo

Maps

Output

Google Google Maps

Google Videos

iQueryUI

MooTools

Local Search

Prototype Scriptaculous

News Search Patent Search

Tild Edit HTML **Edit Code** Libraries » jQuery Wiew Docs \* How to load iQuery and then use the Search API with it. google.load("jquery", "1"); // on page load complete, fire off a iQuery ison-p query 8 // against Google web search 9 function OnLoad(){ var url = "http://ajax.googleapis.com/ajax/services/search/web?q=google&v=1. \$.getJSON(url. function (data) { if (data,responseData,results && data.responseData.results.length > 0) { var results = data.responseData.results; var content = document.getElementBvld('content'); content.innerHTML = ''; for (var i=0; i < results.length; i++) { // Display each result however you wish content.innerHTML += results[i].titleNoFormatting + "<br/>"; To Debug Code Run Code Google.org - Google Technology-Driven Philanthropy

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