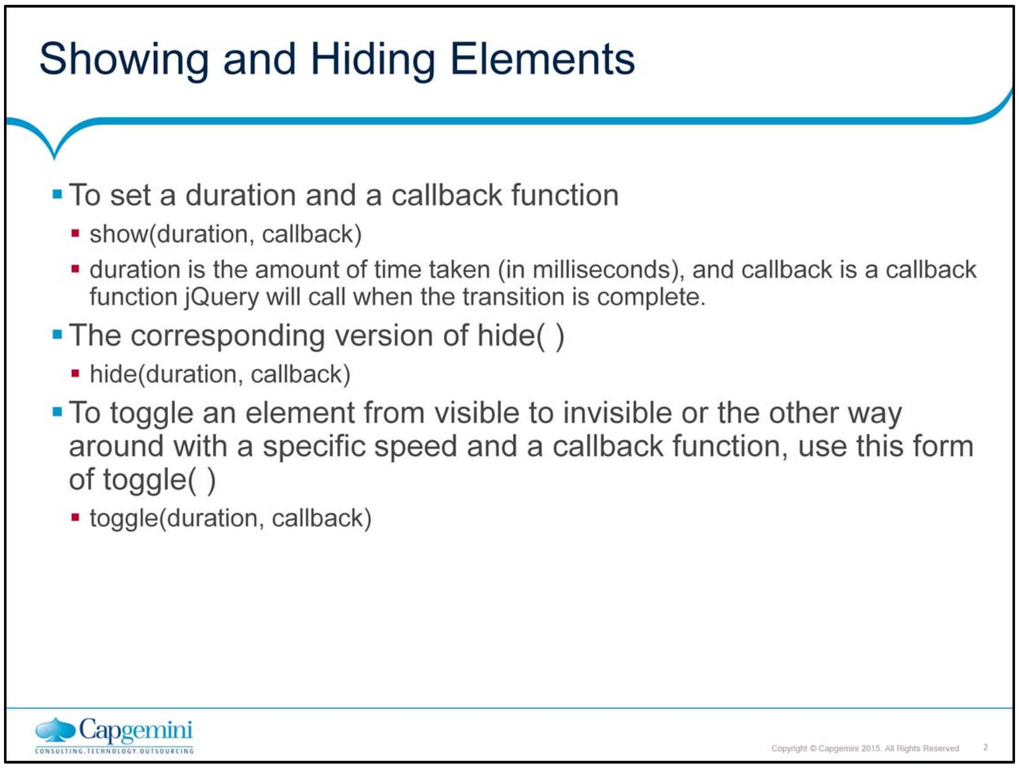
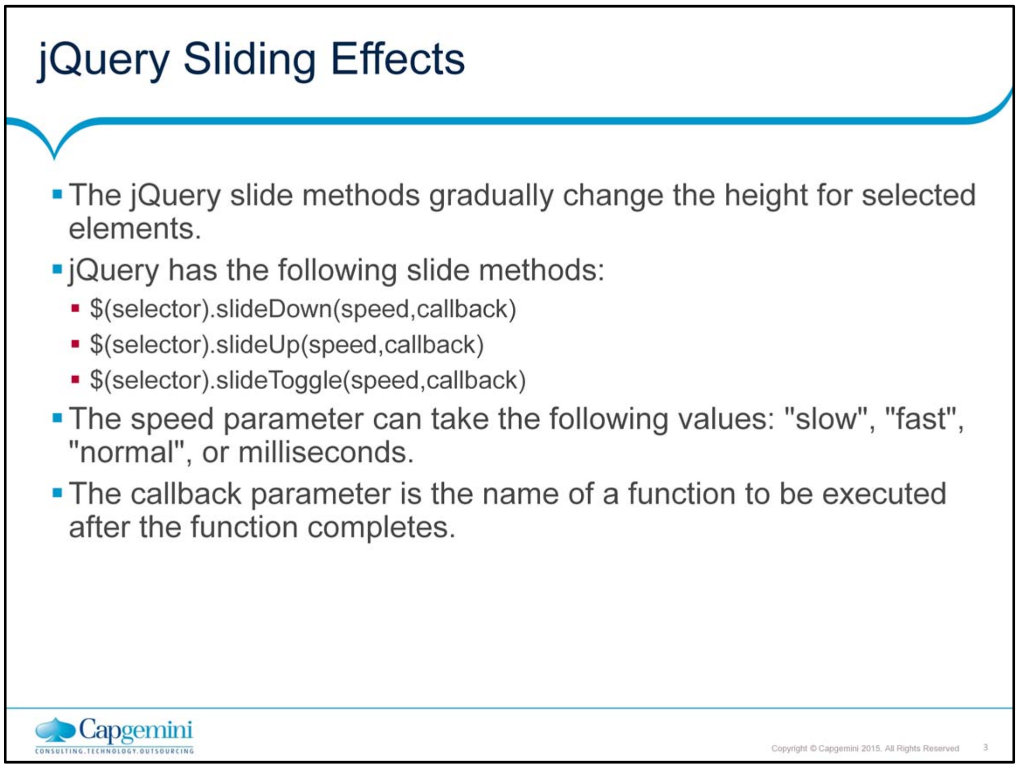
Appendix



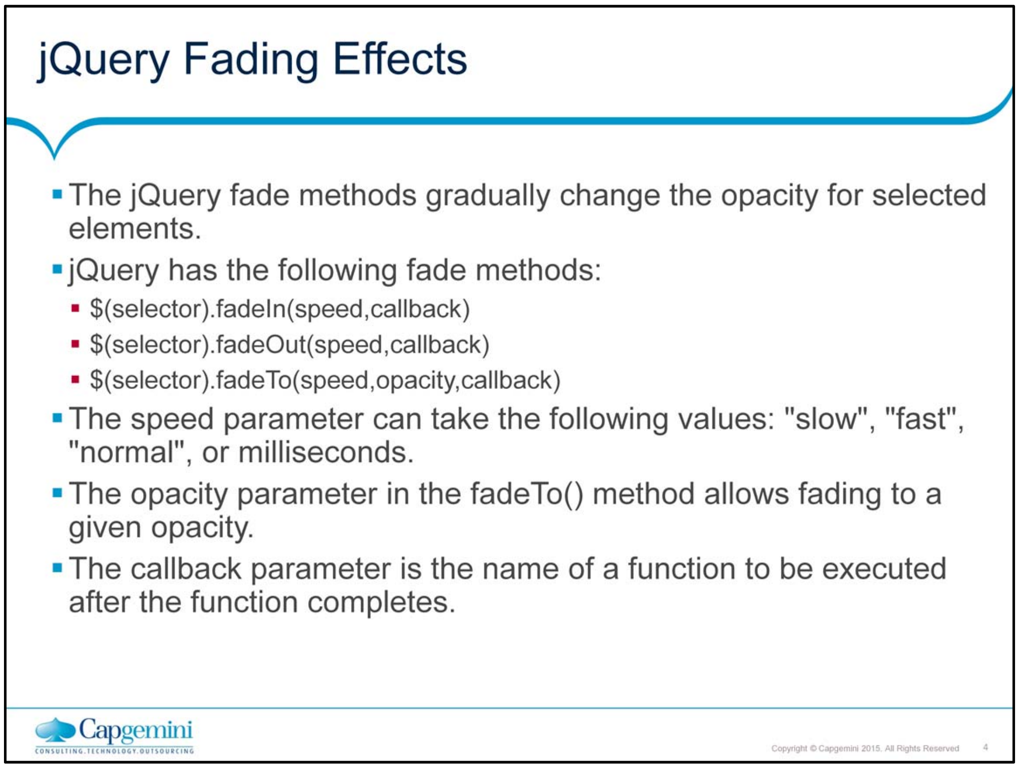
Showing and Hiding Elements

- To set a duration and a callback function
  - show(duration, callback)
  - duration is the amount of time taken (in milliseconds), and callback is a callback function jQuery will call when the transition is complete.
- The corresponding version of hide( )
  - hide(duration, callback)
- To toggle an element from visible to invisible or the other way around with a specific speed and a callback function, use this form of toggle( )
  - toggle(duration, callback)



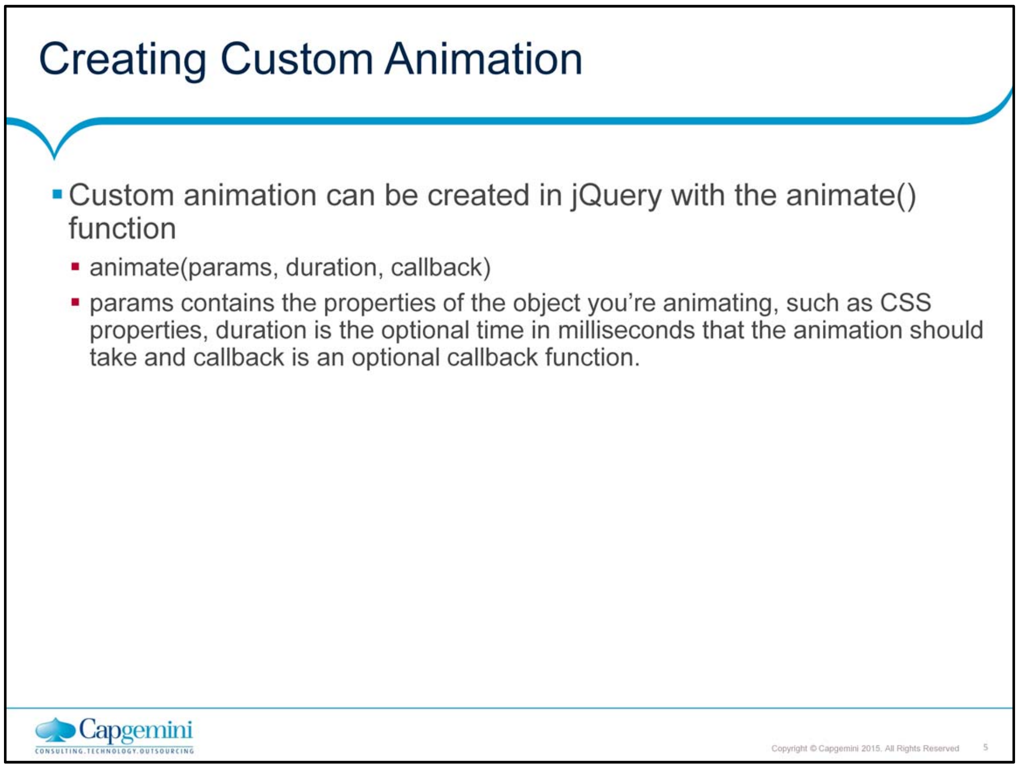
jQuery Sliding Effects

- The jQuery slide methods gradually change the height for selected elements.
- jQuery has the following slide methods:
  - $(selector).slideDown(speed,callback)
  - $(selector).slideUp(speed,callback)
  - $(selector).slideToggle(speed,callback)
- The speed parameter can take the following values: "slow", "fast", "normal", or milliseconds.
- The callback parameter is the name of a function to be executed after the function completes.



jQuery Fading Effects

- The jQuery fade methods gradually change the opacity for selected elements.
- jQuery has the following fade methods:
  - $(selector).fadeIn(speed,callback)
  - $(selector).fadeOut(speed,callback)
  - $(selector).fadeTo(speed,opacity,callback)
- The speed parameter can take the following values: "slow", "fast", "normal", or milliseconds.
- The opacity parameter in the fadeTo() method allows fading to a given opacity.
- The callback parameter is the name of a function to be executed after the function completes.



Creating Custom Animation

- Custom animation can be created in jQuery with the animate() function
  - animate(params, duration, callback)
  - params contains the properties of the object you're animating, such as CSS properties, duration is the optional time in milliseconds that the animation should take and callback is an optional callback function.

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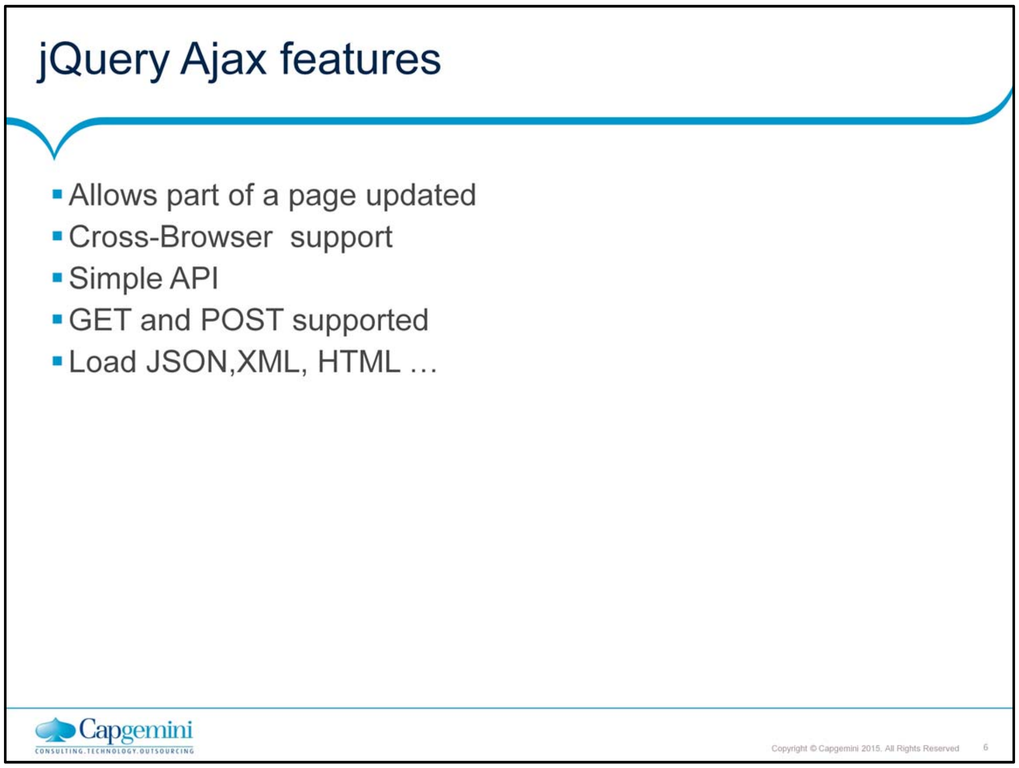
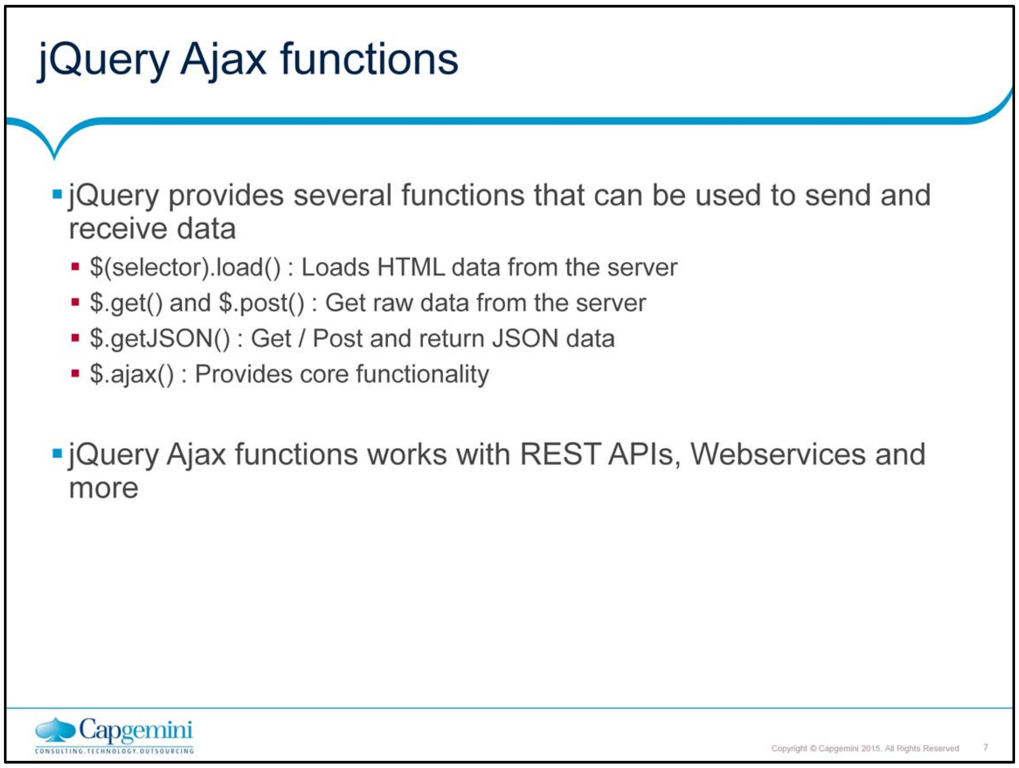


jQuery Ajax features

- Allows part of a page updated
- Cross-Browser support
- Simple API
- GET and POST supported
- Load JSON,XML, HTML …



jQuery Ajax functions

- jQuery provides several functions that can be used to send and receive data
  - $(selector).load() : Loads HTML data from the server
  - $.get() and $.post() : Get raw data from the server
  - $.getJSON() : Get / Post and return JSON data
  - $.ajax() : Provides core functionality
- jQuery Ajax functions works with REST APIs, Webservices and more

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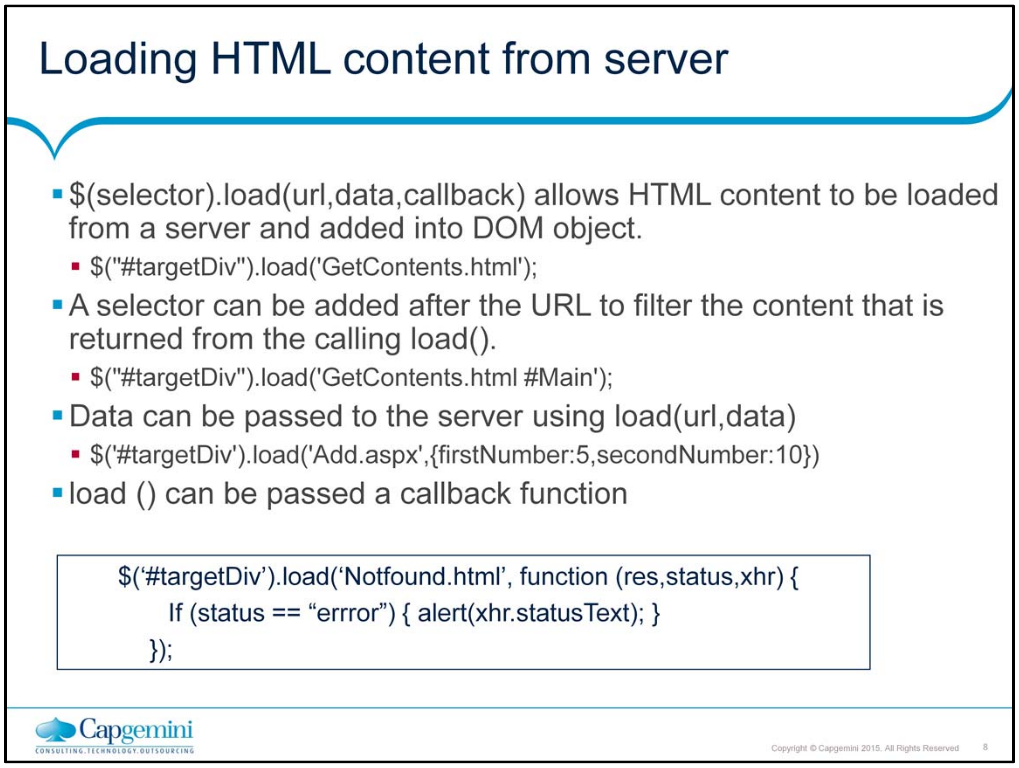

Loading HTML content from server

- $(selector).load(url,data,callback) allows HTML content to be loaded from a server and added into DOM object.
  - $("#targetDiv").load('GetContents.html');
- A selector can be added after the URL to filter the content that is returned from the calling load().
  - $("#targetDiv").load('GetContents.html #Main');
- Data can be passed to the server using load(url,data)
  - $('#targetDiv').load('Add.aspx',{firstNumber:5,secondNumber:10})
- load () can be passed a callback function

```
$(‘#targetDiv’).load(‘Notfound.html’, function (res,status,xhr) {
    If (status == “errror”) { alert(xhr.statusText); }
});
```

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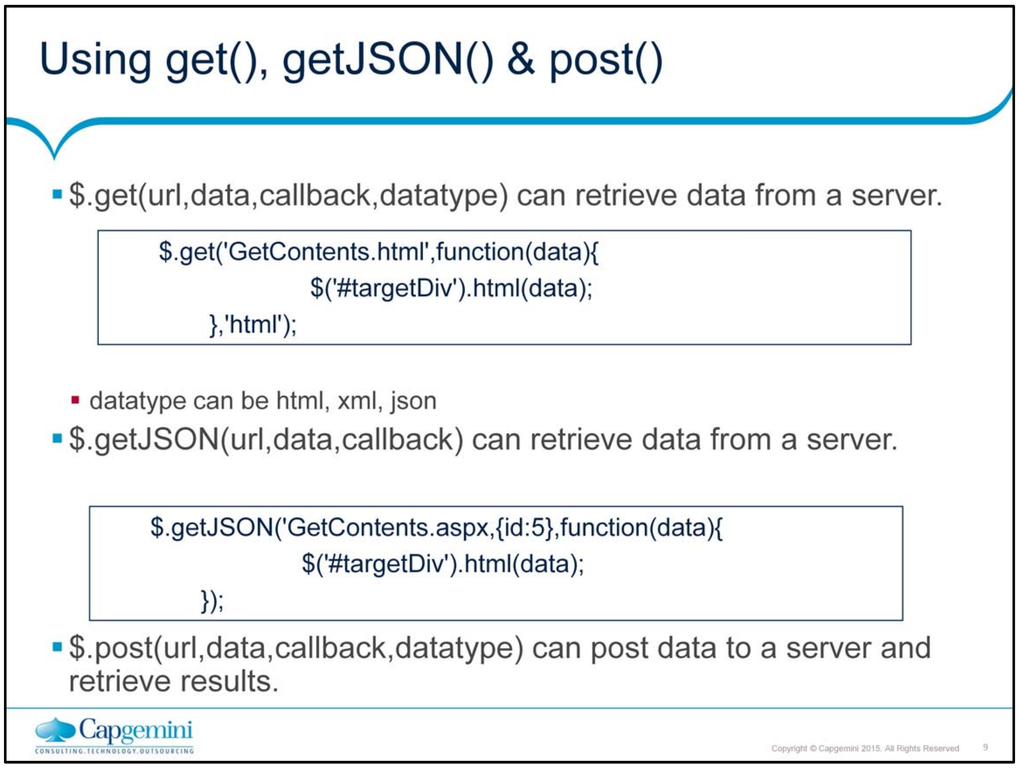

Using get(), getJSON() & post()

- $.get(url,data,callback,datatype) can retrieve data from a server.

```
        $.get('GetContents.html',function(data){
                    $('#targetDiv').html(data);
            },'html');
```

  - datatype can be html, xml, json
- $.getJSON(url,data,callback) can retrieve data from a server.

```
        $.getJSON('GetContents.aspx,{id:5},function(data){
                    $('#targetDiv').html(data);
            });
```

- $.post(url,data,callback,datatype) can post data to a server and retrieve results.

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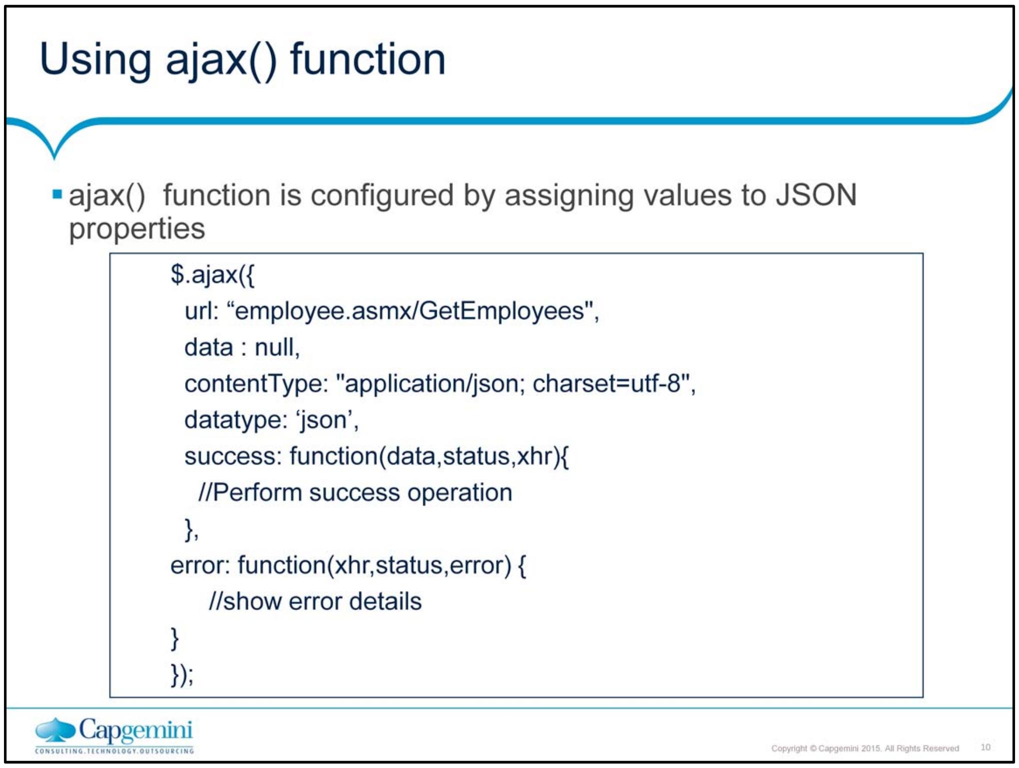
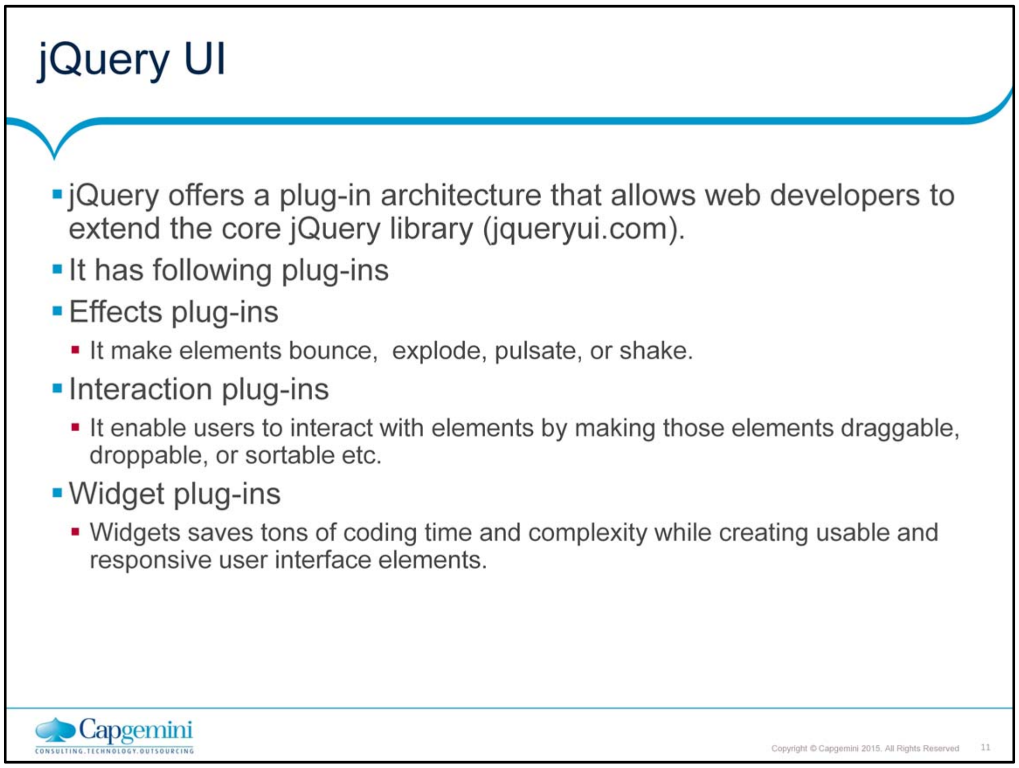


Using ajax() function

- ajax() function is configured by assigning values to JSON properties

```
$.ajax({
  url: “employee.asmx/GetEmployees",
  data : null,
  contentType: "application/json; charset=utf-8",
  datatype: ‘json’,
  success: function(data,status,xhr){
    //Perform success operation
  },
error: function(xhr,status,error) {
      //show error details
}
});
```



jQuery UI

- jQuery offers a plug-in architecture that allows web developers to extend the core jQuery library (jqueryui.com).
- It has following plug-ins
- Effects plug-ins
  - It make elements bounce, explode, pulsate, or shake.
- Interaction plug-ins
  - It enable users to interact with elements by making those elements draggable, droppable, or sortable etc.
- Widget plug-ins
  - Widgets saves tons of coding time and complexity while creating usable and responsive user interface elements.

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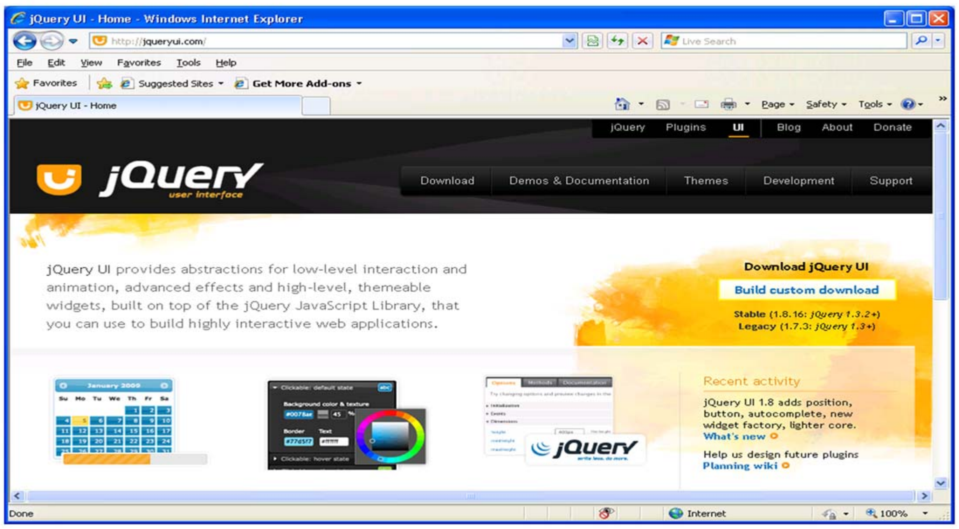
jqueryui.com



jQuery UI provides abstractions for low-level interaction and animation, advanced effects and high-level, themeable widgets, built on top of the jQuery JavaScript Library, that you can use to build highly interactive web applications.

Download jQuery UI

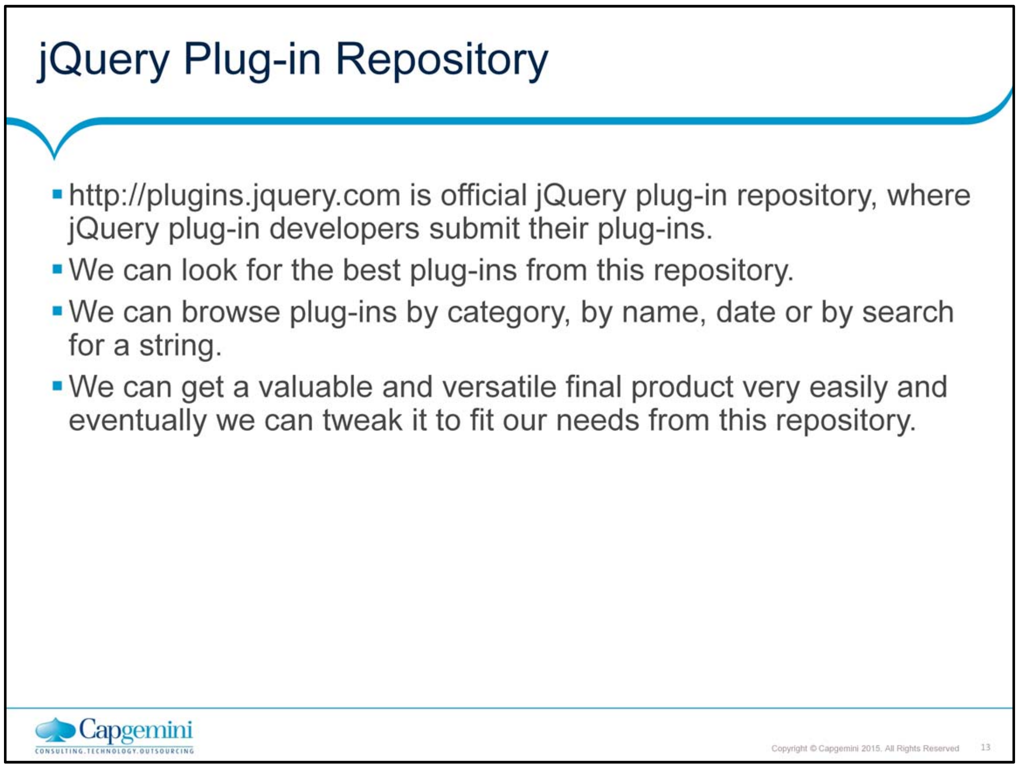
Build custom download

Stable (1.8.16: *jQuery 1.3.2+*)
Legacy (1.7.3: *jQuery 1.3+*)

Recent activity

jQuery UI 1.8 adds position, button, autocomplete, new widget factory, lighter core.
What's new

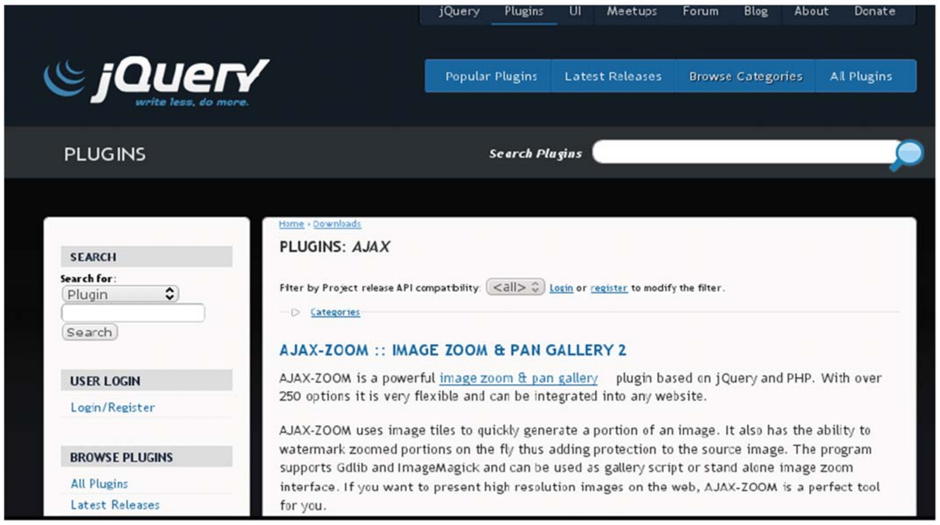
Help us design future plugins
Planning wiki



jQuery Plug-in Repository

- http://plugins.jquery.com is official jQuery plug-in repository, where jQuery plug-in developers submit their plug-ins.
- We can look for the best plug-ins from this repository.
- We can browse plug-ins by category, by name, date or by search for a string.
- We can get a valuable and versatile final product very easily and eventually we can tweak it to fit our needs from this repository.

plugins.jquery.com



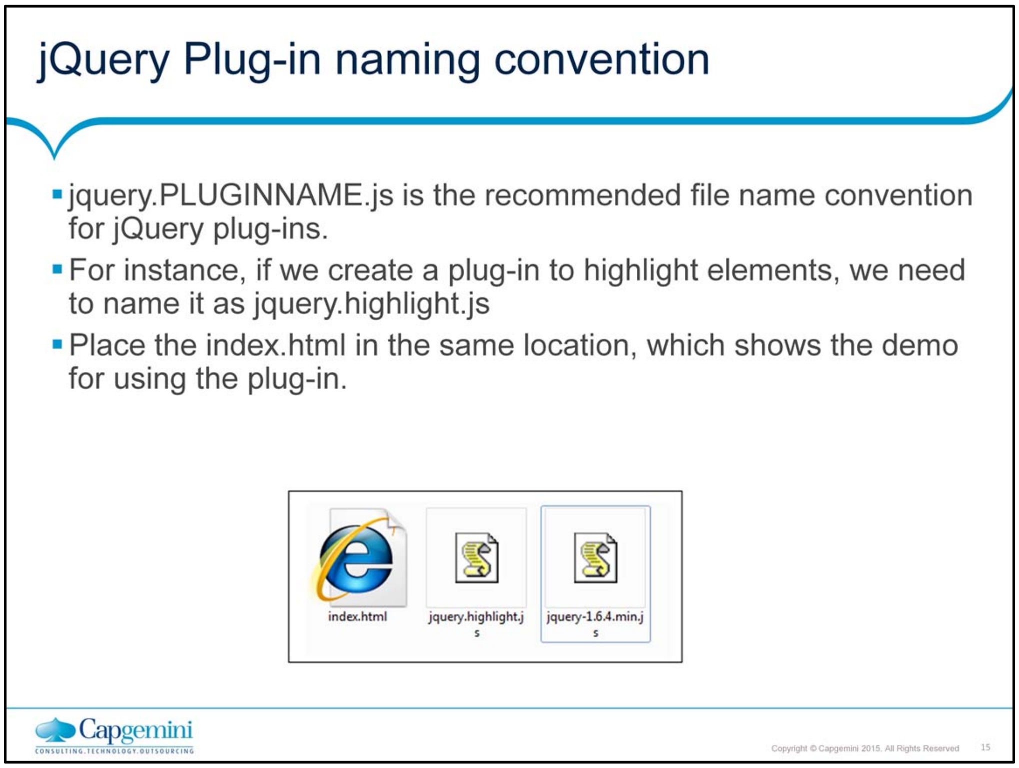
PLUGINS: *AJAX*

Filter by Project release API compatibility: <all> Login or register to modify the filter.

AJAX-ZOOM :: IMAGE ZOOM & PAN GALLERY 2

AJAX-ZOOM is a powerful image zoom & pan gallery plugin based on jQuery and PHP. With over 250 options it is very flexible and can be integrated into any website.

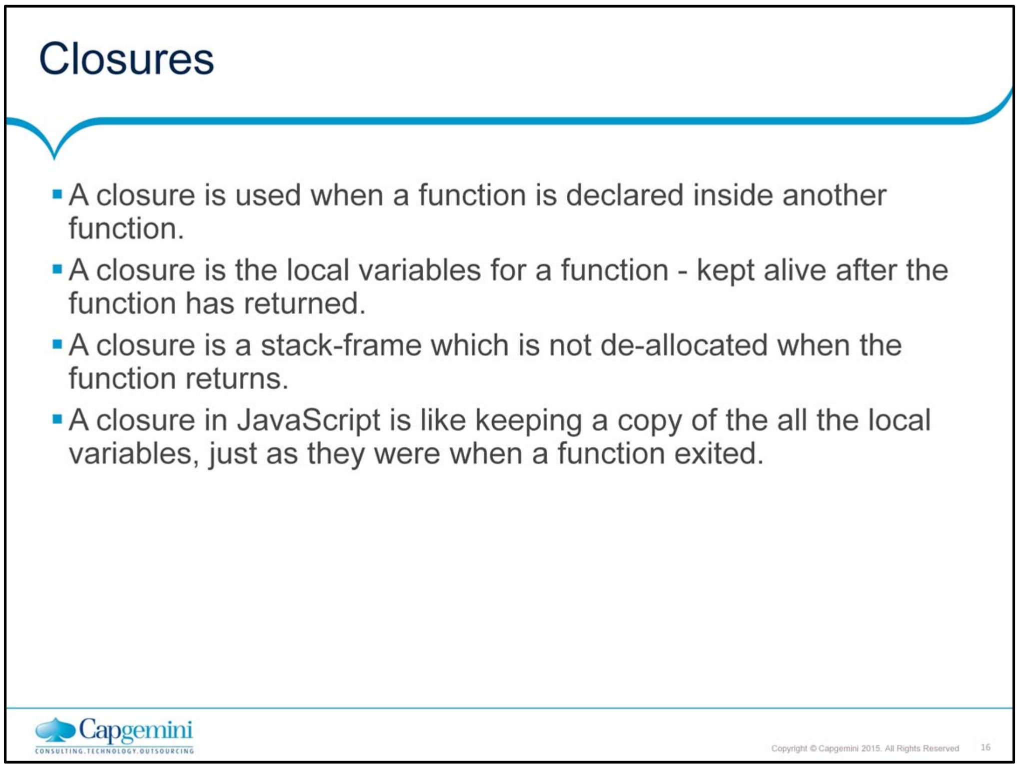
AJAX-ZOOM uses image tiles to quickly generate a portion of an image. It also has the ability to watermark zoomed portions on the fly thus adding protection to the source image. The program supports Gdlib and ImageMagick and can be used as gallery script or stand alone image zoom interface. If you want to present high resolution images on the web, AJAX-ZOOM is a perfect tool for you.



jQuery Plug-in naming convention

- jquery.PLUGINNAME.js is the recommended file name convention for jQuery plug-ins.
- For instance, if we create a plug-in to highlight elements, we need to name it as jquery.highlight.js
- Place the index.html in the same location, which shows the demo for using the plug-in.

index.html
jquery.highlight.js
jquery-1.6.4.min.js



Closures

- A closure is used when a function is declared inside another function.
- A closure is the local variables for a function - kept alive after the function has returned.
- A closure is a stack-frame which is not de-allocated when the function returns.
- A closure in JavaScript is like keeping a copy of the all the local variables, just as they were when a function exited.

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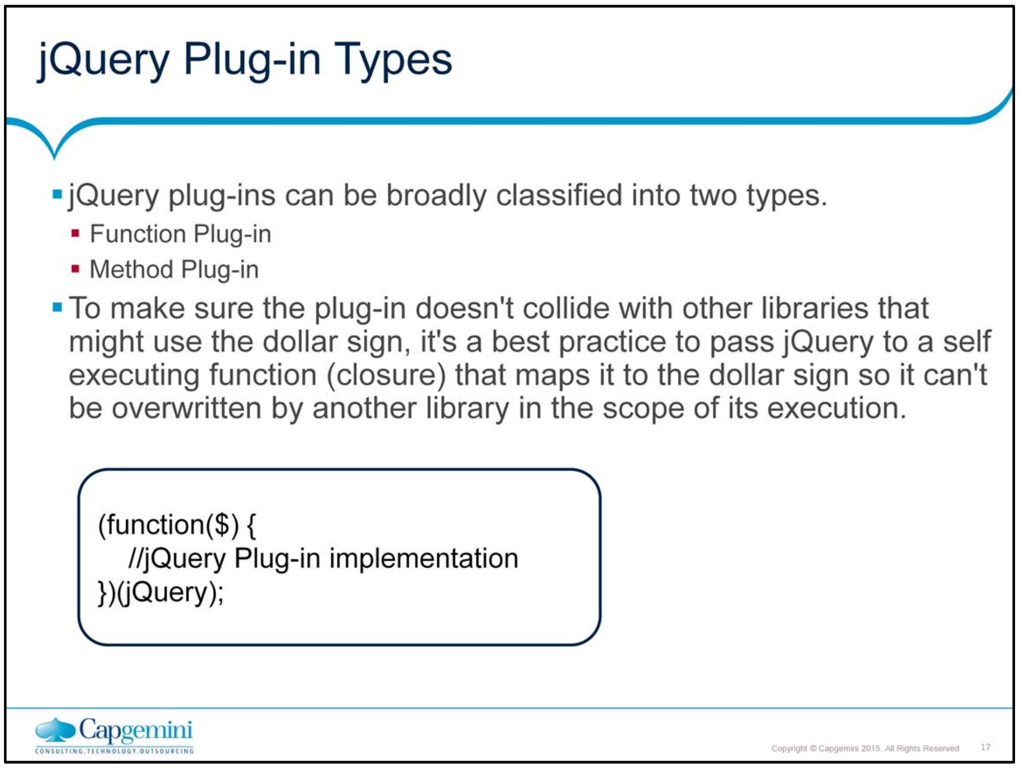

jQuery Plug-in Types

- jQuery plug-ins can be broadly classified into two types.
  - Function Plug-in
  - Method Plug-in
- To make sure the plug-in doesn't collide with other libraries that might use the dollar sign, it's a best practice to pass jQuery to a self executing function (closure) that maps it to the dollar sign so it can't be overwritten by another library in the scope of its execution.

```
(function($) {
   //jQuery Plug-in implementation
})(jQuery);
```

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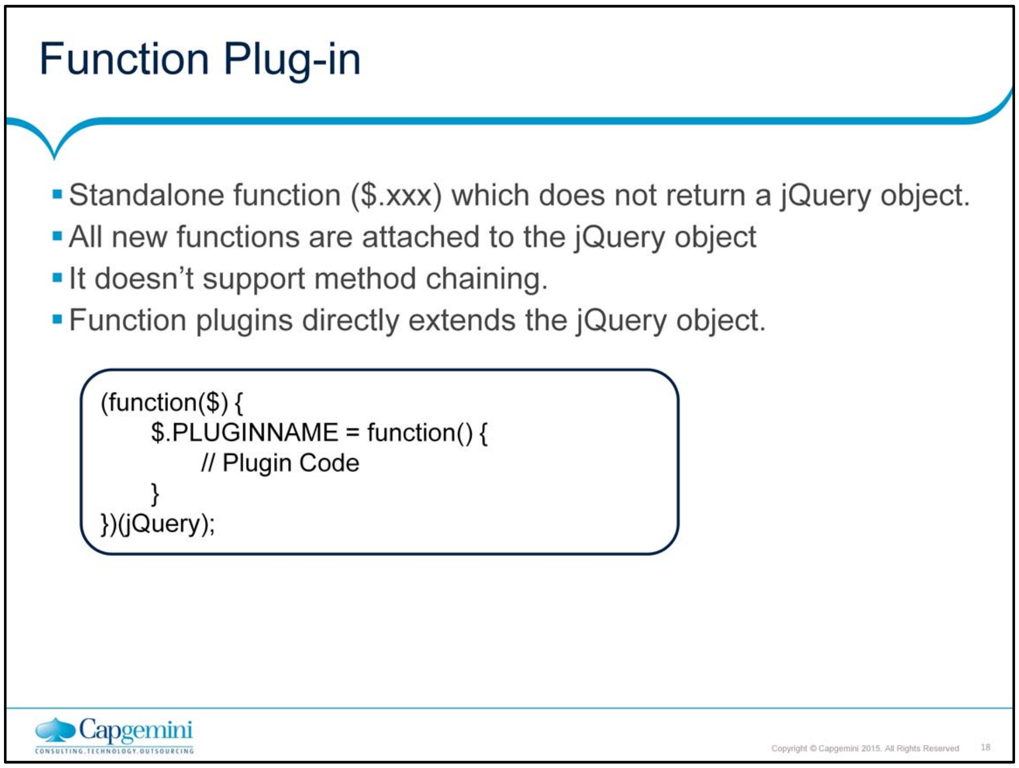

Function Plug-in

- Standalone function ($.xxx) which does not return a jQuery object.
- All new functions are attached to the jQuery object
- It doesn’t support method chaining.
- Function plugins directly extends the jQuery object.

```
(function($) {
        $.PLUGINNAME = function() {
                // Plugin Code
        }
})(jQuery);
```

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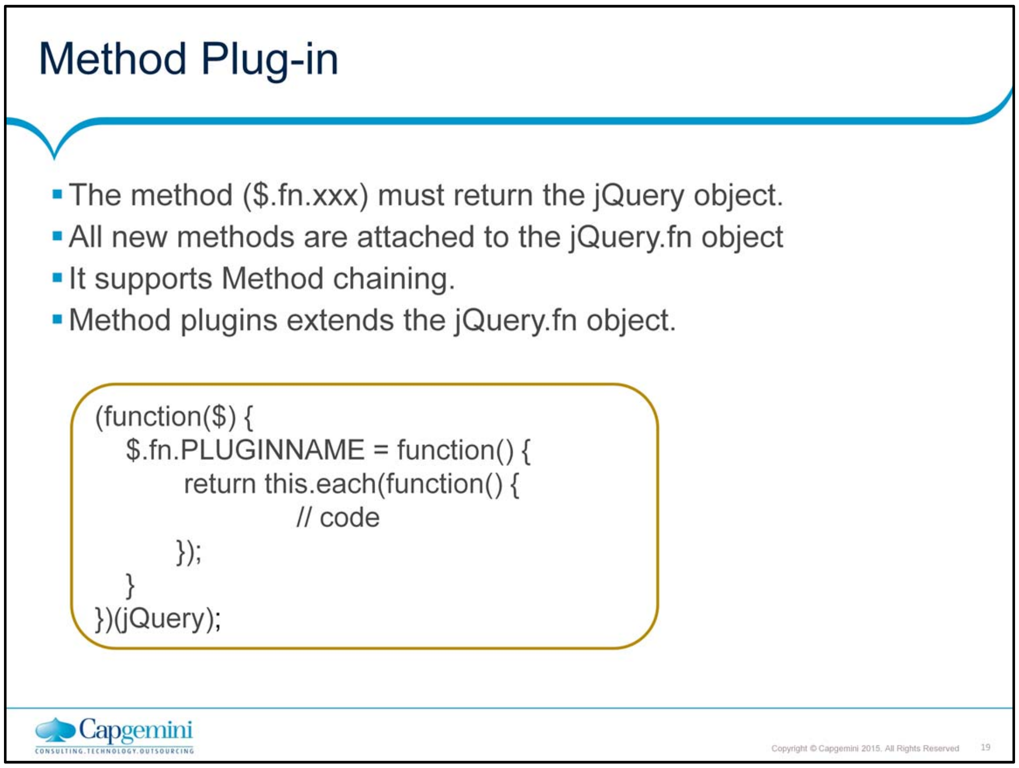
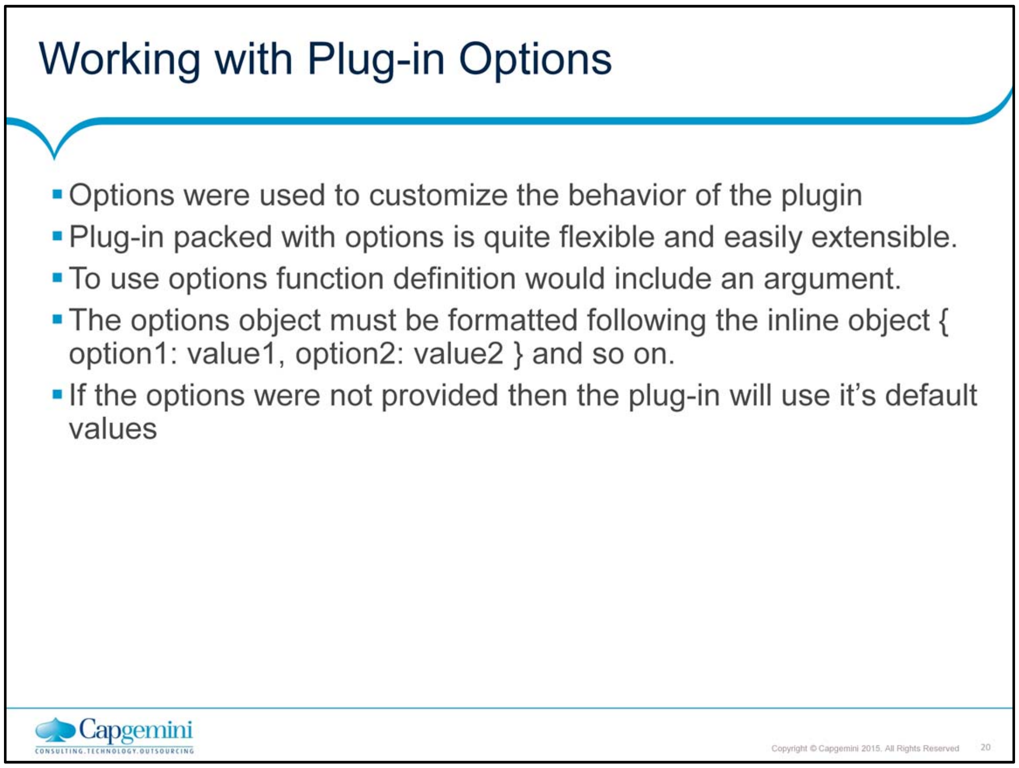


Method Plug-in

- The method ($.fn.xxx) must return the jQuery object.
- All new methods are attached to the jQuery.fn object
- It supports Method chaining.
- Method plugins extends the jQuery.fn object.

```
(function($) {
   $.fn.PLUGINNAME = function() {
         return this.each(function() {
                     // code
         });
   }
})(jQuery);
```



Working with Plug-in Options

- Options were used to customize the behavior of the plugin
- Plug-in packed with options is quite flexible and easily extensible.
- To use options function definition would include an argument.
- The options object must be formatted following the inline object { option1: value1, option2: value2 } and so on.
- If the options were not provided then the plug-in will use it's default values

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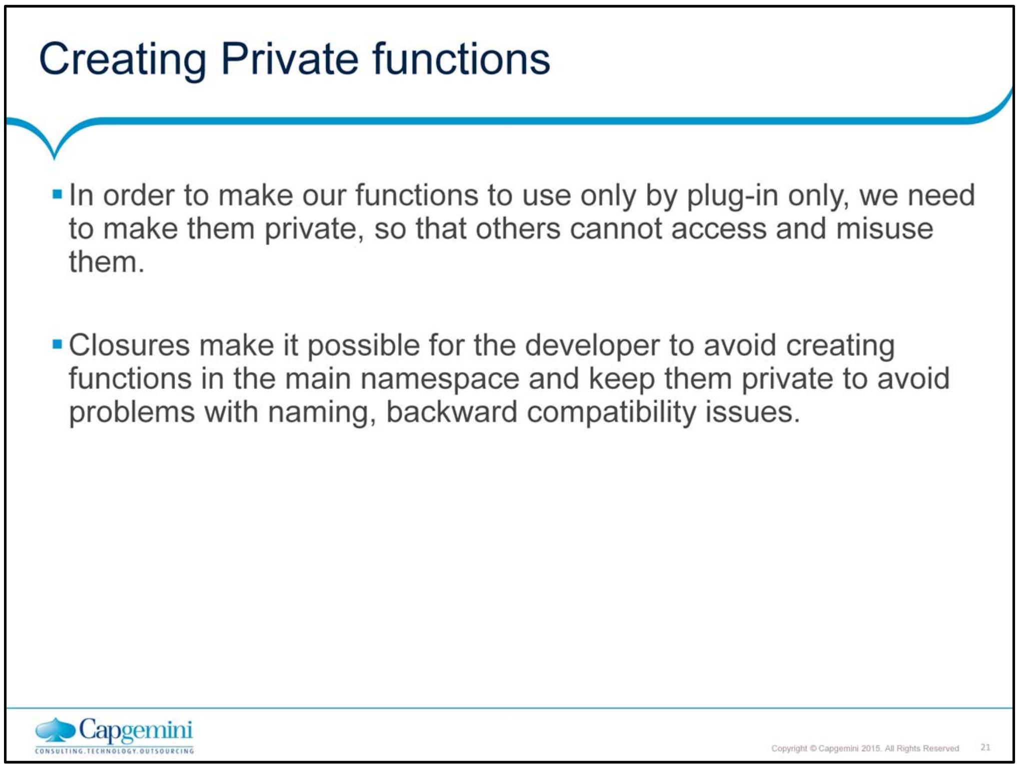

Creating Private functions

- In order to make our functions to use only by plug-in only, we need to make them private, so that others cannot access and misuse them.
- Closures make it possible for the developer to avoid creating functions in the main namespace and keep them private to avoid problems with naming, backward compatibility issues.