Expanding the functionality of jQuery

#### **Telerik Software Academy**

Learning & Development Team <a href="http://academy.telerik.com">http://academy.telerik.com</a>

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- A Plugin is just a method that extends the jQuery objects prototype
  - Enabling all jQuery objects to use this method
- Once a plugin is imported, it is used as regular jQuery method
  - Like addClass(), fadeout() and hide()

- jQuery has many ready-to-use plugins
  - A library jQueryUI for UI controls
- Plugins for UI
  - Tabs

```
$("#tabs-holder").tabs();
```

Arrangeable elements

```
$("#grid" ).sortable();
```

Proin elit arcu, rutrum commodo, vehicula tempus, commodo a, risus. Curabitur nec arcu. Donec sollicitudin mi sit amet mauris. Nam elementum quam ullamcorper ante. Etiam aliquet massa et lorem.

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# Creating Custom jQuery Plugins

#### Creating jQuery Plugins

- jQuery has an easy way to extend the initial functionality with plugins
  - Just create a regular JavaScript method and attach it to jQuery.fn object

```
(function($){
  $.fn.zoom = function(){
    var $this = $(this);
    $this.on("mouseover", function() {
      //zoom in element
    });
    $this.on("mouseout", function() {
      //zoom out element
    });
                             $(".image").zoom();
}(jQuery));
```

# Zoom Plugin

## Chaining in Plugins

- Chaining is pretty good and useful feature
  - Better to be implemented in our plugins
  - Done easy, just return this at the end of the plugin function

```
(function($){
    $.fn.zoom = function(){
       var $this = $(this);
       $this.on('mouseover', function() {...});
       $this.on('mouseout', function() {...});
       return $this;
    }
}(jQuery));
    $\( \) .zoom()
       .addClass('zoom');
```

## Chaining in Plugins

## Plugins with Options

Creating plugins more customizable

### Plugins with Options

- Plugins can also be provided with options
  - Just pass regular function parameters

```
(function($){
   //zoom with size percents
   $.fn.zoom = function(size){
    var $this = $(this);
    $this.on('mouseover', function() {...});
    $this.on('mouseout', function() {...});
    return $this;
   }
}(jQuery));
```

## Plugins with Options

## **Plugins Options**

- Yet the options sometimes become too many
  - When too many arguments, just use a options object
  - Give the options as a JSON-like object

## Plugins with Options Object

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## jQuery Plugins



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#### Homework

- Create a jQuery plugin for creating dropdown list
  - By given the following:

Produces the following HTML:

- And make it work as SELECT node
  - Selecting an one of the generated LI nodes, selects the corresponding OPTION node
    - So \$('#dropdown:selected') works

#### Homework (2)

- \*Create a jQuery plugin for fading in/fading out message box
  - Creates a message box

```
var msgBox = $('#message-box').messageBox();
```

- Show a success/error message in the box
  - Showing is done by setting the opacity of the message from 0 to 1 in an interval of 1 second
  - The message disappears after 3 seconds

```
msgBox.success('Success message');
msgBox.error('Error message');
```