AngularJS AJAX - $http

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**$http** is an AngularJS service for reading data from remote servers.

AngularJS $http

The AngularJS $http service makes a request to the server, and returns a response.

Example

Make a simple request to the server, and display the result in a header:

<div ng-app="myApp" ng-controller="myCtrl">   
  
<p>Today's welcome message is:</p>  
<h1>{{myWelcome}}</h1>  
  
</div>  
  
<script>

var app = angular.module('myApp', []);  
app.controller('myCtrl', function($scope, $http) {  
    $http.get("welcome.htm")  
    .then(function(response) {  
        $scope.myWelcome = response.data;  
    });  
});

</script>

[Try it Yourself »](http://www.w3schools.com/angular/tryit.asp?filename=try_ng_http_get)

Methods

The example above uses the .get method of the $http service.

The .get method is a shortcut method of the $http service. There are several shortcut methods:

* .delete()
* .get()
* .head()
* .jsonp()
* .patch()
* .post()
* .put()

The methods above are all shortcuts of calling the $http service:

Example

var app = angular.module('myApp', []);  
app.controller('myCtrl', function($scope, $http) {  
    $http({  
        method : "GET",  
        url : "welcome.htm"  
    }).then(function mySucces(response) {  
        $scope.myWelcome = response.data;  
    }, function myError(response) {  
        $scope.myWelcome = response.statusText;  
    });  
});

[Try it Yourself »](http://www.w3schools.com/angular/tryit.asp?filename=try_ng_http)

The example above executes the $http service with one argument, an object specifying the HTTP method, the url, what to do on success, and what to to on failure.

Properties

The response from the server is an object with these properties:

* .config the object used to generate the request.
* .data a string, or an object, carrying the response from the server.
* .headers a function to use to get header information.
* .status a number defining the HTTP status.
* .statusText a string defining the HTTP status.

Example

var app = angular.module('myApp', []);  
app.controller('myCtrl', function($scope, $http) {  
    $http.get("welcome.htm")  
    .then(function(response) {  
        $scope.content = response.data;  
        $scope.statuscode = response.status;  
        $scope.statustext = response.statustext;   
    });  
});

[Try it Yourself »](http://www.w3schools.com/angular/tryit.asp?filename=try_ng_http_properties)

To handle errors, add one more function to the .then method:

Example

var app = angular.module('myApp', []);  
app.controller('myCtrl', function($scope, $http) {  
    $http.get("wrongfilename.htm")  
    .then(function(response) {  
        //First function handles success  
        $scope.content = response.data;  
    }, function(response) {  
        //Second function handles error  
        $scope.content = "Something went wrong";  
    });  
});

[Try it Yourself »](http://www.w3schools.com/angular/tryit.asp?filename=try_ng_http_error)

JSON

The data you get from the response is expected to be in JSON format.

JSON is a great way of transporting data, and it is easy to use within AngulaJS, or any other JavaScript.

Example: On the server we have a file that returns a JSON object containing 15 customers, all wrapped in array calledrecords.

[Take a look at the JSON object.](http://www.w3schools.com/angular/angular_http.asp)

Example

The ng-repeat directive is perfect for looping through an array:

<div ng-app="myApp" ng-controller="customersCtrl">   
  
<ul>  
  <li ng-repeat="x in myData">  
    {{ x.Name + ', ' + x.Country }}  
  </li>  
</ul>  
  
</div>  
  
<script>

var app = angular.module('myApp', []);  
app.controller('customersCtrl', function($scope, $http) {  
    $http.get("customers.php").then(function(response) {  
        $scope.myData = response.data.records;  
    });  
});

</script>

[Try it Yourself »](http://www.w3schools.com/angular/tryit.asp?filename=try_ng_customers_json)

Application explained:

The application defines the customersCtrl controller, with a $scope and $http object.

$http is an **XMLHttpRequest object** for requesting external data.

$http.get() reads **JSON data** from <http://www.w3schools.com/angular/customers.php>.

On success, the controller creates a property, myData, in the scope, with JSON data from the server.