



Exercises AngularJS Day-1

This exercise will guide you through some of the most useful directives and filters in Angular, and eventually end up as a simple page, for a site selling used cars.

Note: It is important for this exercise to follow and read the links given as hints. The goal is not to complete the exercise as quickly as possible but to learn as much as possible ;-)

1) Create a new empty project and an html file cars.html. Copy the content below into the file:

```
<!DOCTYPE html>
<html>
<head lang="en">
  <meta charset="UTF-8">
  <title>Title</title>
</head>
<body>
  <h1>Title</h1>
  <!-- Add your Content here -->
<script>
  var myApp = angular.module('DemoApp', []);

  myApp.controller('CarController', [function() {
    var self = this;
    self.cars = [
      { year: 1997, registered: 867621600000, make: 'Ford', model: 'E350', description: 'ac, abs, moon', price: 3000 },
      { year: 1999, registered: 945212400000, make: 'Chevy', model: 'Venture', description: 'None', price: 4900 },
      { year: 2000, registered: 953766000000, make: 'Chevy', model: 'Venture', description: '', price: 5000 },
      { year: 1996, registered: 844380000000, make: 'Jeep', model: 'Grand Cherokee', description: 'Air, moon roof, loaded', price: 4799 }
    ];
    self.title = "Cars Demo App";
    self.predicate = 'make';

  }]);
</script>
</body>
</html>
```

2) For this exercise we will keep our HTML and JavaScript in the same file, to get an overview of all "things" involved.

3) Include the AngularJS script as outlined in this link: <https://docs.angularjs.org/misc/downloading>

4) Add these attributes to the html tag: `ng-app="DemoApp" ng-controller="CarController as ctrl"`

5) Change the page so that the title (both places) are set via Data Binding from the Controllers title property.

6) Add an h2 tag below the title with the text "Number of cars: " Add the actual number via an Angular Expression `{{ .. }}`

7) Use Angulars `ng-repeat` directive to create a table with a row for each car, and seven columns. The first column should hold the index (starting with one), and the remaining six columns, the properties for a car.

Hint:

1. See the example here: <https://docs.angularjs.org/api/ng/directive/ngRepeat>

Using Filters:

8) Using the **date** Filter.

The value for registration date will not make any sense to "normal" users. Use Angular's *date* filter to format it like: dd-MM-yyyy.

Hints: <http://docs.angularjs.org/api/ng/filter/date>

9) Using the **currency** Filter

Use Angular's *currency* filter to format the price as a currency. Initially it will use the \$ sign as the currency symbol. Download the relevant currency file for your language (angular-locale_da-dk.js for Danish) via this link: http://code.angularjs.org/1.4.7/i18n/angular-locale_da.js

Include the file just below the line that includes Angular. Verify that the correct currency symbol is used.

Actually this file also reflects you date. Remove anything in your date filter (that is, use only: `date`). Verify that date is displayed correctly according to the language you selected.

Hint: <https://docs.angularjs.org/api/ng/filter/currency>

Filtering results.

10) Using the **filter** Filter

Add an input element (type=search) and change the code so we can filter the table.

Example: we write Chevy and the table only shows Chevis. We write 199 and only get cars from this period.

Hint: <https://docs.angularjs.org/api/ng/filter/filter>

Sorting results:

11) Using the **orderBy** Filter

The ability to sort when we have large amounts of data is important. Change the code so we can press the column header (all apart from index) to sort using that property. If we press one more time, it should sort in the reverse order.

Hint: You have a complete example with explanation here: <https://docs.angularjs.org/api/ng/filter/orderBy>

12) Styling the application:

Add a reference to bootstrap:

```
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.0/css/bootstrap.min.css">
```

Put a `<div class="container">` around all your content.

Add this class to your table start tag: `<table class = "table">`

Run, enjoy and observe how much we achieved, with such a small amount of code 😊