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innovation
in healthcare

Filters

May 2015

Agenda

- **Filters Introduction**

- Inbuilt Filters

- Custom Filters

Filters Introduction

- AngularJS filter formats the value of an expression for display to the user
- Filters can be used in view templates, controllers or services and it is easy to define your own filters.
- Filters can be applied to expressions in view templates using the following syntax:
  - **{{ expression | filter }}**
- Filters can be applied to the result of another filter. This is called "chaining" and uses the following syntax:
  - **{{ expression | filter1 | filter2 | ... }}**
- Filters may have arguments. The syntax for this is
  - **{{ expression | filter:argument1:argument2:... }}**

    E.g. the markup {{ 1234 | number:2 }} formats the number 1234 with 2 decimal points using the number filter. The resulting value is 1,234.00
- There are other inbuilt filters like orderBy, search, dateformat, currency
- We can also create custom filters !!! ☺

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Inbuilt Filters

- Angularjs comes with many ready to use inbuilt filters.

Name	Description
filter	Selects a subset of items from array and returns it as a new array.
currency	Formats a number as a currency (ie $1,234.56). When no currency symbol is provided, default symbol for current locale is used.
number	Formats a number as text.
date	Formats date to a string based on the requested format.
json	Allows you to convert a JavaScript object into JSON string.
lowercase	Converts string to lowercase.
uppercase	Converts string to uppercase.
limitTo	Creates a new array or string containing only a specified number of elements. The elements are taken from either the beginning or the end of the source array, string or number, as specified by the value and sign (positive or negative) of limit. If a number is used as input, it is converted to a string.
orderBy	Orders a specified array by the expression predicate. It is ordered alphabetically for strings and numerically for numbers. Note: if you notice numbers are not being sorted correctly, make sure they are actually being saved as numbers and not strings.

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Custom Filters

- Custom filters give us a nice way to create our own filter to format the data we use in our apps, or present to the user.

- //below custom filter formats person name – prefixes person name with greeting

```
var app = angular.module('app', []);
    app.filter('greet', function () {
        return function (item) { return "Hello "+ item;
     };
    });

    app.controller('PersonCtrl', function () {
                        this.username = 'Todd Motto'; });
    //Then we declare it in the HTML:
    <div ng-app="app">
    <div ng-controller="PersonCtrl as person">
    <p> {{ person.username | greet }} </p>
    </div>
    </div>
```

Inbuilt and Custom Filters

- Demo link on custom filter

  http://ctgit/silviap/angularjsdemosandlabs/blob/master/Day3/day3_Demos/4_custom_filter.html

- Demo link on inbuilt filters

  Number Filter:

  http://ctgit/silviap/angularjsdemosandlabs/edit/master/Day3/day3_Demos/3_inbuiltfilters/2_filter_number_format.html

  Currency Filter:

  http://ctgit/silviap/angularjsdemosandlabs/blob/master/Day3/day3_Demos/3_inbuilt_filters/1_filter_currency_format.html

  Order By Filter:

  http://ctgit/silviap/angularjsdemosandlabs/blob/master/Day3/day3_Demos/3_inbuilt_filters/3_orderby_limitTo_filter.html

  Date filter:

  http://ctgit/silviap/angularjsdemosandlabs/blob/master/Day3/day3_Demos/3_inbuilt_filters/4_filter_date_format.html

  Search Filter:

  http://ctgit/silviap/angularjsdemosandlabs/blob/master/Day3/day3_Demos/3_inbuilt_filters/5_filter_search_searchstrict.html

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Filters - Finding your way (1/2)

Technical Questions:

1. Find different scenarios where custom filter can be used

2. How to do filtering on object having nested object properties in Angularjs

As you start to work with AngularJS Filters, you will frequently encounter technical issues which are not covered by this training.

How will you resolve these technical issues on AngularJS Filters?

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Filters - Finding your way (2/2)

Resources	Remarks
https://docs.angularjs.org/api/ng/filter	Angularjs official doc on filters
http://toddmotto.com/everything-about-custom-filters-in-angular-js/	Good blog on custom filters
http://onoffswitch.net/filter-deep-object-properties-angularjs/	
CurioCT - https://interct/SitePages/CurioCT.aspx	
CTCourses – Filters	In addition to updated course material, CTCourse contains reference sites (Library) and list of project teams with expertise on geolocation

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Thank You