

Instruções Exercício: Angular Factory e Service¹

Objetivos e resultados

Este exercício explora o conceito de *dependency injection* no AngularJS. Nele, você irá explorar como criar seus próprios serviços usando duas abordagens: *factory* e *service*. Ao finalizar essa atividade, você será capaz de:

- Usar *dependency injection* para habilitar o uso de serviços customizados em módulos e controladores do Angular
- Projetar serviços customizados usando as abordagens *factory* e *service*

Criando controllers.js e services.js

- Utilize o código disponibilizado pelo professor e na sub-pasta *scripts* (dentro da pasta *app*), crie dois arquivos *controllers.js* e *services.js*
- Abra o arquivo *app.js* e copie o código inteiro para o *controllers.js*
- No arquivo *app.js* remova todo o o código de controle, e deixe-o conforme abaixo:

```
'use strict';  
  
angular.module('confusionApp', []);
```

- Abra o arquivo *menu.html* e inclua referências para os arquivos *controllers.js* e *services.js*

```
<script src="scripts/controllers.js"></script>  
<script src="scripts/services.js"></script>
```

- Adicione o código a seguir no arquivo *services.js*

```
'use strict';  
  
angular.module('confusionApp')  
    .factory('menuFactory', function() {  
  
        });
```

¹ Exercício adaptado do curso de "Frameworks JavaScript para Front-End: AngularJS" fornecido pela Universidade de Ciência e Tecnologia de Hong Kong através da plataforma <https://www.coursera.org/>

- Adicione o array Javascript abaixo, dentro do código do *factory*, definido acima

```
var dishes=[
    {
        name:'Uthapizza',
        image: 'images/uthapizza.png',
        category: 'mains',
        label:'Hot',
        price:'4.99',
        description:'A unique combination of Indian Uthappam
(pancake) and Italian pizza, topped with Cerignola olives, ripe vine cherry tomatoes,
Vidalia onion, Guntur chillies and Buffalo Paneer.',
        comments: [
            {
                rating:5,
                comment:"Imagine all the eatables, living in
conFusion!",
                author:"John Lemon",
                date:"2012-10-16T17:57:28.556094Z"
            },
            {
                rating:4,
                comment:"Sends anyone to heaven, I wish I could get
my mother-in-law to eat it!",
                author:"Paul McVites",
                date:"2014-09-05T17:57:28.556094Z"
            },
            {
                rating:3,
                comment:"Eat it, just eat it!",
                author:"Michael Jaikishan",
                date:"2015-02-13T17:57:28.556094Z"
            },
            {
                rating:4,
                comment:"Ultimate, Reaching for the stars!",
                author:"Ringo Starry",
                date:"2013-12-02T17:57:28.556094Z"
            },
            {
                rating:2,
                comment:"It's your birthday, we're gonna party!",
                author:"25 Cent",
                date:"2011-12-02T17:57:28.556094Z"
            }
        ]
    },
    {
        name:'Zucchipakoda',
        image: 'images/zucchipakoda.png',
        category: 'appetizer',
        label:'',
        price:'1.99',
        description:'Deep fried Zucchini coated with mildly spiced
Chickpea flour batter accompanied with a sweet-tangy tamarind sauce',
        comments: [
            {
                rating:5,
                comment:"Imagine all the eatables, living in
conFusion!",
```

```

        author:"John Lemon",
        date:"2012-10-16T17:57:28.556094Z"
    },
    {
        rating:4,
        comment:"Sends anyone to heaven, I wish I could get
my mother-in-law to eat it!",
        author:"Paul McVites",
        date:"2014-09-05T17:57:28.556094Z"
    },
    {
        rating:3,
        comment:"Eat it, just eat it!",
        author:"Michael Jaikishan",
        date:"2015-02-13T17:57:28.556094Z"
    },
    {
        rating:4,
        comment:"Ultimate, Reaching for the stars!",
        author:"Ringo Starry",
        date:"2013-12-02T17:57:28.556094Z"
    },
    {
        rating:2,
        comment:"It's your birthday, we're gonna party!",
        author:"25 Cent",
        date:"2011-12-02T17:57:28.556094Z"
    }
]

},
{
    name:'Vadonut',
    image: 'images/vadonut.png',
    category: 'appetizer',
    label:'New',
    price:'1.99',
    description:'A quintessential ConFusion experience, is it a
vada or is it a donut?',
    comments: [
        {
            rating:5,
            comment:"Imagine all the eatables, living in
conFusion!",
            author:"John Lemon",
            date:"2012-10-16T17:57:28.556094Z"
        },
        {
            rating:4,
            comment:"Sends anyone to heaven, I wish I could get
my mother-in-law to eat it!",
            author:"Paul McVites",
            date:"2014-09-05T17:57:28.556094Z"
        },
        {
            rating:3,
            comment:"Eat it, just eat it!",
            author:"Michael Jaikishan",
            date:"2015-02-13T17:57:28.556094Z"
        },
        {
            rating:4,

```

```

        comment:"Ultimate, Reaching for the stars!",
        author:"Ringo Starry",
        date:"2013-12-02T17:57:28.556094Z"
    },
    {
        rating:2,
        comment:"It's your birthday, we're gonna party!",
        author:"25 Cent",
        date:"2011-12-02T17:57:28.556094Z"
    }
]
},
{
    name:'ElaiCheese Cake',
    image: 'images/elaicheesecake.png',
    category: 'dessert',
    label:'',
    price:'2.99',
    description:'A delectable, semi-sweet New York Style Cheese
Cake, with Graham cracker crust and spiced with Indian cardamoms',
    comments: [
        {
            rating:5,
            comment:"Imagine all the eatables, living in
conFusion!",
            author:"John Lemon",
            date:"2012-10-16T17:57:28.556094Z"
        },
        {
            rating:4,
            comment:"Sends anyone to heaven, I wish I could get
my mother-in-law to eat it!",
            author:"Paul McVites",
            date:"2014-09-05T17:57:28.556094Z"
        },
        {
            rating:3,
            comment:"Eat it, just eat it!",
            author:"Michael Jaikishan",
            date:"2015-02-13T17:57:28.556094Z"
        },
        {
            rating:4,
            comment:"Ultimate, Reaching for the stars!",
            author:"Ringo Starry",
            date:"2013-12-02T17:57:28.556094Z"
        },
        {
            rating:2,
            comment:"It's your birthday, we're gonna party!",
            author:"25 Cent",
            date:"2011-12-02T17:57:28.556094Z"
        }
    ]
}
]
];

```

- Adicione um objeto JavaScript vazio no *factory*

```
var menufac = {};
```

- Por fim, adicione o código abaixo no *factory* para definir a função e o retorno do objeto

```
menufac.getDishes = function(){
    return dishes;
};
menufac.getDish = function (index) {
    return dishes[index];
};
return menufac;
```

- No *controllers.js*, remova os objetos *dishes* e coloque o seguinte código:

```
$scope.dishes= menuFactory.getDishes();
```

- Faça a injeção de dependência para injetar o serviço *menuFactory* no *MenuController*:

```
.controller('MenuController', ['$scope', 'menuFactory', function($scope, menuFactory)
{
```

- No *DishDetailController* substitua o objeto *dish* por uma chamada ao serviço *meuFactory*

```
$scope.dish= menuFactory.getDish(3);
```

- Adicione a dependência ao *meuFactory*

```
.controller('DishDetailController', ['$scope', 'menuFactory', function($scope,
menuFactory) {
```

- Após salvar as mudanças, no *dishdetail.html* adicione o seguinte código para incluir os arquivos JS:

```
<script src="scripts/controllers.js"></script>
<script src="scripts/services.js"></script>
```

Usando Service ao invés de Factory

- Faça as alterações necessárias no arquivo *service.js* para que a chamada ao *factory* seja substituída por uma chamada ao *service*