

Angular Factory and Service

Jogesh K. Muppala



THE DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING
計算機科學及工程學系



香港科技大學
THE HONG KONG UNIVERSITY OF
SCIENCE AND TECHNOLOGY

Angular Services

- Substitutable objects wired together using DI
- Allows organizing and sharing code across an app
- Lazily instantiated
- Singletons

Angular's Built-in Services

- Built-in services always start with \$
 - e.g., \$http , \$scope, \$rootScope, \$location, \$parse, \$templateCache, \$animate, \$injector
 - Inject them using DI

Creating Your Own Services

- Five functions that declare services
 - `service()`
 - `factory()`
 - `provider()`
 - `constant()`
 - `value()`

Angular Factory

```
angular.module('confusionApp')
  .factory('menuFactory', function() {

    var menufac = {};
    var dishes = [ ... ];

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

- Usage:

```
angular.module('confusionApp')
  .controller('MenuController', ['$scope',
    'menuFactory', function($scope, menuFactory)
    {
      $scope.dishes= menuFactory.getDishes();

    }]);
```

Angular Service

```
angular.module('confusionApp')
  .service('menuFactory', function() {
    var dishes = [ ... ];

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

- Usage is same as factory:

```
angular.module('confusionApp')
  .controller('MenuController', ['$scope',
    'menuFactory', function($scope, menuFactory)
    {
      $scope.dishes= menuFactory.getDishes();
    }
  ]));
```

Exercise: Angular Factory and Service

- Use dependency injection to enable the use of custom services in Angular modules and controllers
- Design custom services using the Angular factory and service approaches