

# Frontend Development

## AngularJS Forms

# Topics

- services
- ng-options
- ng-form



# Services

- Objects used for organize and share code in applications;
- Injected in controllers or other services
- Lazy instantiated
- Singleton



# Services

- Most common types of service recipes:
  - Factory – calls the function and injects the returned value;
  - Service – calls the function as a constructor and injects the created object;

# Services

- Factory recipe:

```
myApp.factory('myFactory', function() {  
  ...  
});
```

```
myApp.controller('myController', ['myFactory',  
function(myFactory){  
  ...  
});
```

# Services

- Service recipe:

```
myApp.service('myService', ['myFactory', function(myFactory) {  
  ...  
}]);
```

```
myApp.controller('myController', ['$scope', 'myFactory',  
  'myService', function($scope, myFactory, myService){  
  ...  
}]);
```

## ng-options

- Built-in AngularJS directive
- Used to generate <option> elements for a <select> element
- Iterates an array or an object and generates a <option> element for each item
- Used with ng-model directive
- Bind the selected option to the model form the ng-model directive

## ng-options

for array data sources:

- label **for** value **in** array
- select **as** label **for** value **in** array
- label **group by** group **for** value in array
- select **as** label **group by** group **for** value **in** array **track by** trackexpr

for object data sources:

- label **for** (key , value) **in** object
- select **as** label **for** (key , value) **in** object
- label **group by** group **for** (key, value) **in** object
- select **as** label **group by** group **for** (key, value) **in** object



## ng-options

```
$scope.colors = [  
  {name:'black', shade:'dark'},  
  {name:'white', shade:'light'},  
  {name:'red', shade:'dark'},  
  {name:'blue', shade:'dark'},  
  {name:'yellow', shade:'light'}  
];
```

```
<select ng-model="myColor" ng-options="color.name for color in colors">  
</select>
```

```
<select ng-model="myColor" ng-options="color.name group by color.shade for color in colors">  
</select>
```

## ng-form

- Similar to <form> element from HTML
- Can be used as element or attribute
- Can be nested inside another ng-form directive
- Useful for validation of forms
- 'name' attribute is used to publish to current scope form controller



## • ng-form

- Elements:
  - input(text, number, email, checkbox, radio,...)
  - select
  - textarea

# ng-form

- Directives:
  - ng-required="[boolean]"
  - ng-disabled="[boolean]"
  - ng-submit="[expression]"
  - ng-dirty
  - ng-valid
  - ng-invalid

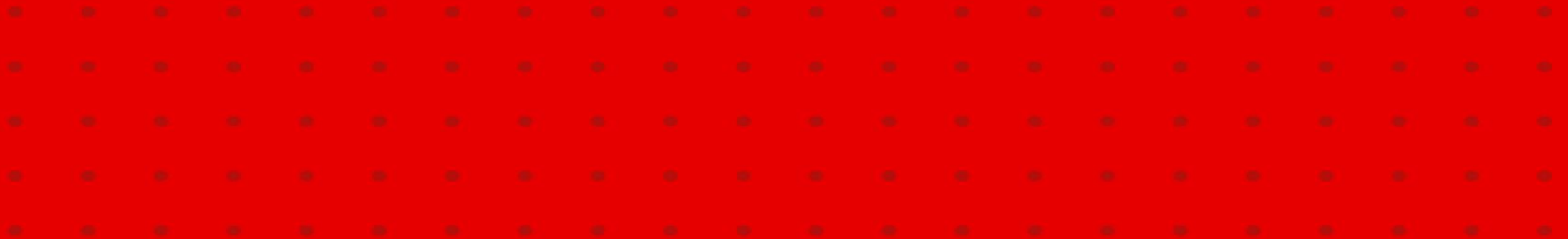
## ng-form

```
<form name="myForm" ng-controller="FormController" class="my-form">
  userType: <input name="input" ng-model="userType" required>
  <span class="error" ng-show="myForm.input.$error.required">Required!</span><br>
  userType = {{userType}}<br>
  myForm.input.$valid = {{myForm.input.$valid}}<br>
  myForm.input.$error = {{myForm.input.$error}}<br>
  myForm.$valid = {{myForm.$valid}}<br>
  myForm.$error.required = {{!!myForm.$error.required}}<br>
</form>
```

# Workshop: AngularJS Forms



# Questions?



# Thank you!

