

Angular Forms and Form Validation

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Forms and Two-way Data Binding

- Angular's two-way data binding makes it straightforward to work with forms:
 - Define a JavaScript object on the \$scope

```
.controller('ContactController', ['$scope', function($scope) {  
    $scope.feedback = {mychannel:"", firstName:"",  
                        lastName:"", agree:false, email:"" };  
}]);
```
 - Use ng-model directive on form fields

```
<input type="text" class="form-control" id="firstname" name="firstname"  
    placeholder="Enter First Name"  
    ng-model="feedback.firstName" required>
```

Binding Select

- Select items can be bound by defining JavaScript object
var channels = [{value:"tel", label:"Tel."},
 {value:"Email",label:"Email"}];
- Then bind using ng-options directive
 <select class="form-control" ng-model="feedback.mychannel"
 ng-options="channel.value as channel.label for channel in channels">
 <option value="">Tel. or Email?</option>
 </select>

Angular Form Validation

- Turn off HTML5 form validation:
`<form class="form-horizontal" name="feedbackForm"
 ng-submit="sendFeedback()" novalidate>`
- Angular takes over responsibility for validation
- Make sure to give the form a name
- ng-submit directive specifies the function to call

Angular Form Validation Directives

- Angular validates the form fields before copying the value over to the \$scope
- Some directives of interest:
 - ng-minlength
 - ng-maxlength
 - ng-pattern: can use regex

Field Properties

- Use Field name and form name
 - e.g., `feedbackForm.firstName.$pristine` in the form, and `$scope.feedbackForm.firstName.$pristine` in the controller code

Property	Description
<code>\$pristine</code>	true if form has not been changed
<code>\$dirty</code>	reverse of <code>\$pristine</code>
<code>\$valid</code>	true if form field/whole form is valid
<code>\$invalid</code>	reverse of <code>\$valid</code>

Field Properties and CSS

- Bootstrap provides a lot of CSS classes to enable display of form validation state and messages:
 - `.has-error`, `.has-warning`, `.has-success`
 - `.help-block` to display helpful messages below the field

Exercise: Angular Forms and Form Validation

- Use Angular support for HTML forms
- Establish two-way data binding between form fields and JavaScript variables and object properties.
- Use Angular's support for form validation
- Use JavaScript to perform form validation in Angular.