

Building Reusable Directives and Helpers



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AngularJS Directives

form-group-validation

Full Name

John Doe



input-validation-icons

ui-select

x Samantha <samantha@email.com>

x Wladimir <wladimir@email.com>

Overview



Introduction to UI Bootstrap

A simple directive helper

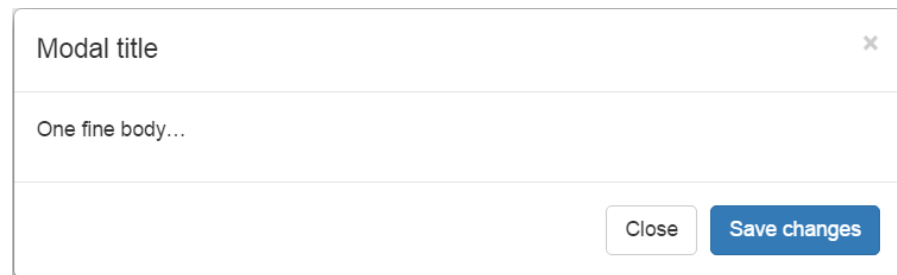
Introduction to UI Grid

A custom grid directive and helper

Bootstrap and AngularJS



Well done! You successfully read this important alert message.



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UI Bootstrap



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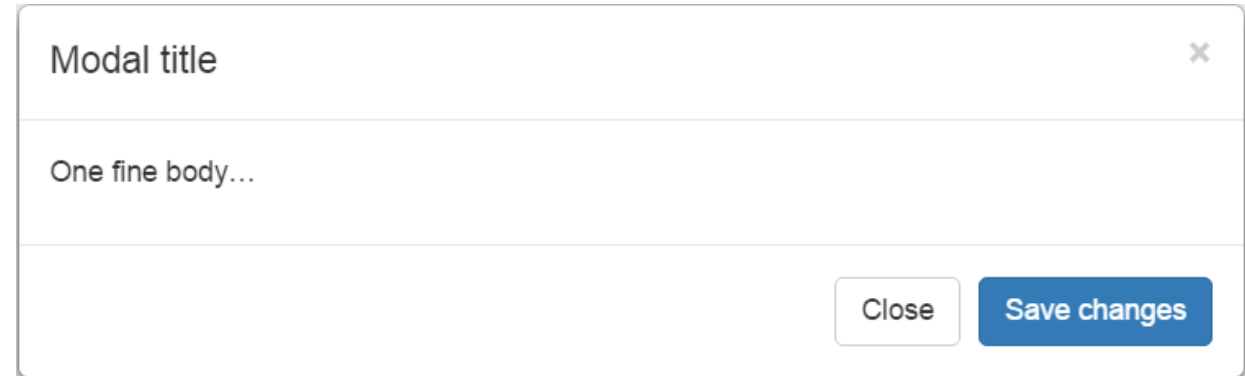


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UI Bootstrap

```
$modal.open({  
  templateUrl: '/some/template',  
  controller: 'ModalController',  
  size: 'lg'  
});
```



```
<progressbar  
  class="progress-striped active"  
  max="200"  
  value="vm.value"  
  type="danger">
```



```
<alert type="{{alert.type}}">{{alert.msg}}</alert>
```



Well done! You successfully read this important alert message.

UI Bootstrap vs. the Core Components

```
<!-- Nav tabs -->
<ul class="nav nav-tabs" role="tablist">
  <li class="active">
    <a href="#home" role="tab" data-toggle="tab">Home</a>
  </li>
  <li>
    <a href="#profile" role="tab" data-toggle="tab">Profile</a>
  </li>
  <li>
    <a href="#messages" role="tab" data-toggle="tab">Messages</a>
  </li>
  <li>
    <a href="#settings" role="tab" data-toggle="tab">Settings</a>
  </li>
</ul>

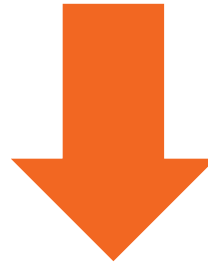
<!-- Tab panes -->
<div class="tab-content">
  <div role="tabpanel" class="tab-pane active" id="home">...</div>
  <div role="tabpanel" class="tab-pane" id="profile">...</div>
  <div role="tabpanel" class="tab-pane" id="messages">...</div>
  <div role="tabpanel" class="tab-pane" id="settings">...</div>
</div>
```

UI Bootstrap vs. the Core Components

```
<tabset>
  <tab heading="Home">...</tab>
  <tab heading="Profile">...</tab>
  <tab heading="Messages">...</tab>
  <tab heading="Settings">...</tab>
</tabset>
```


UI Bootstrap vs. the Core Components

```
<alert type="info" dismiss-on-timeout="10000">  
  I will disappear in 10 seconds!  
</alert>
```



I will disappear in 10 seconds!

AngularJS Forms Using Bootstrap and MVC 5

<http://www.pluralsight.com/courses/angularjs-forms-bootstrap-mvc5>


The Downside

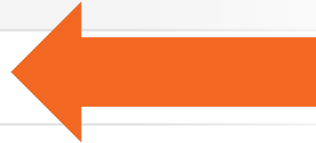
```
<input type="text"  
  class="form-control"  
  datepicker-popup="{{format}}"  
  ng-model="dt"  
  is-open="opened"  
  min-date="minDate"  
  max-date="'2015-06-22'"  
  datepicker-options="dateOptions"  
  date-disabled="disabled(date, mode)"  
  ng-required="true"  
  close-text="Close" />
```



Good luck remembering all that!

The Rating Helper


Zack Beasley 	
Rate this customer: ★★★★★★★★☆☆	
E-mail	Work: zack@work.com Home: zack@home.com
Work Address	123 Zack Street Suite B New York, NY 55555

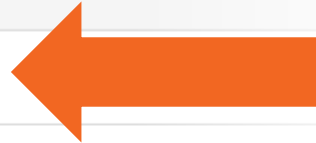


ui.bootstrap.rating

Options
ng-model
max
readonly
on-hover
on-leave
state-on
state-off
rating-states

The Rating Helper

Zack Beasley 	
Rate this customer: ★★★★★★★☆☆☆	
E-mail	Work: zack@work.com Home: zack@home.com
Work Address	123 Zack Street Suite B New York, NY 55555



```
@(Html.Angular()  
    .UIRating("vm.customer.rating")  
    .NgClick("vm.setRating()")  
    .Max(10))
```

Fluent API

Demo: Building a Helper for the Rating Directive



UI Grid

```
<table class="table table-striped table-bordered">
  <thead>
    ...
  </thead>
  <tbody>
    <tr ng-repeat="customer in vm.customers">
      <td>
        {{customer.Name}}
      </td>
      <td>
        {{customer.WorkEmail}}
      </td>
      <td>
        {{customer.CreateDate}}
      </td>
    </tr>
  </tbody>
</table>
```

Name	Work E-mail	Date Acquired
Zack Beasley	zack@work.com	7/16/15
John Doe	john@work.com	7/1/15
Roy Irvine	roy@work.com	7/6/15
Vere Rowland	vere@work.com	7/11/15

UI Grid



AngularUI

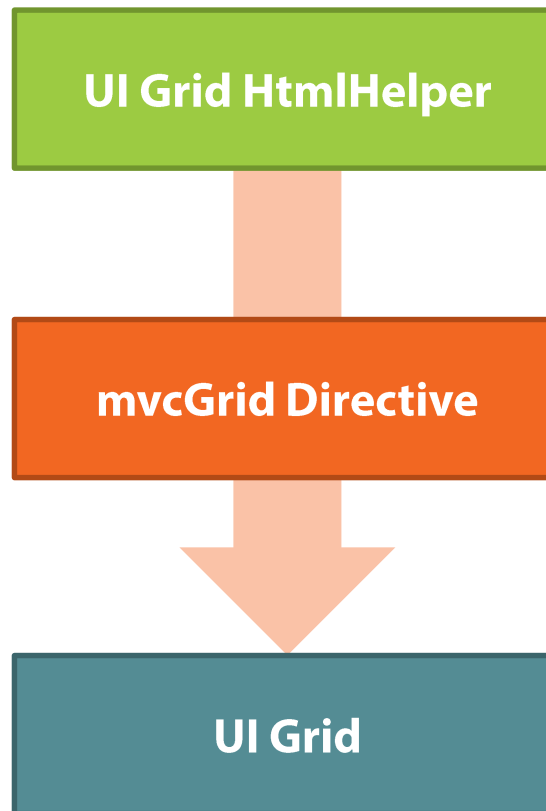
UI Grid - A data grid for **AngularJS**

Features
Sorting
Filter
Virtualization (scales to large data sets)
Grouping
In-line editing
Plugin support

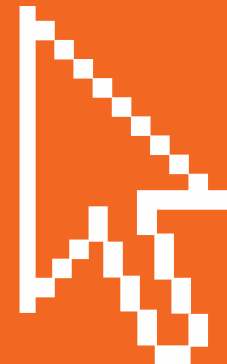
AngularUI Fundamentals

<http://www.pluralsight.com/courses/angularui-fundamentals>

A UI Grid Helper



Demo: Building a Grid Helper



What We've Accomplished

mvcGrid

```
@(Html.Angular().GridFor<ReportController>(c => c.NewCustomers())
    .Title("New Customers")
    .Columns<NewCustomerReportViewModel>(config =>
    {
        config.Add(x => x.Name);
        config.Add(x => x.WorkEmail);
        config.Add(x => x.CreateDate, "Date Joined", "date: 'MM/dd/yyyy'");
    })
```

ui.bootstrap.rating

```
@(Html.Angular().UIRating("vm.customer.rating")
    .NgClick("vm.setRating()")
    .Max(10))
```

What We've Accomplished

- ✓ Easier to discover
 - ✓ Intellisense lists all available helpers
 - ✓ Fluent API eliminates need to remember option and setting specifics
- ✓ Encapsulation of solutions
 - ✓ Helpers can do things the Right Way for your project
 - ✓ Makes it easy to fall in to the “pit of success”
(that's a good thing!)

Up Next...

Closing thoughts

