

# Controller Patterns

John Papa  
<http://johnpapa.net>  
Twitter: @john\_papa



**pluralsight**   
hardcore developer training

# Controllers Drive AngularJS

Role of a  
Controller

Linking

Classic vs New

\$scope

Why Dots Matter

Resolvers

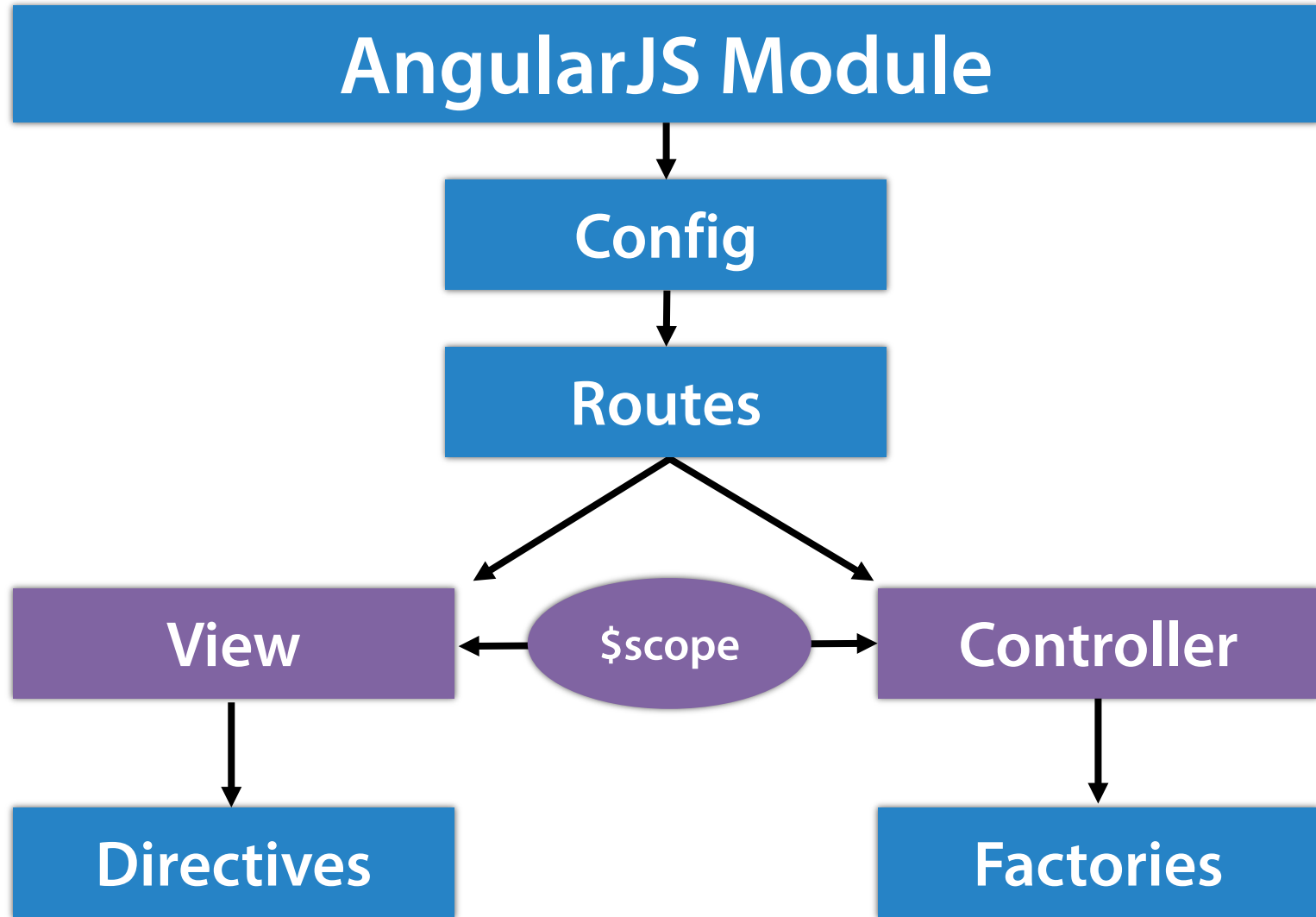
Nesting

Testing

# What Does the Controller Do?



# Controller Drives the Presentation



# JavaScript Constructors

```
// JavaScript Constructor  
function Avenger() {  
    this.name = 'Captain America';  
    this.prop = 'shield';  
}
```

Creates a new  
instance of Avenger

```
var capt = new Avenger();
```



# Controllers and Constructors

```
angular
  .module('app.avengers')
  .controller('Avenger', Avenger);

// "Classic" $scope syntax
function Avenger($scope) {
  $scope.name = 'Captain America';
  $scope.prop = 'shield';
}
```

```
// "Controller As" syntax
function Avenger() {
  var vm = this;
  vm.name = 'Captain America';
  vm.prop = 'shield';
}
```

# Beyond Binding

**\$apply**

**\$digest**

**\$watch**

**\$broadcast**

**\$destroy**

**\$emit**

**\$eval**

**\$evalAsync**

**\$id**

**\$new**

**\$on**

**\$parent**

**\$root**

**\$watchCollection**



**Additional Controller \$scope features**

# Which Name Takes Precedence ?

```
<div ng-controller="Shell">
  {{ name }}
  <div ng-controller="Customer">
    {{ name }}
    <div ng-controller="Order">
      {{ name }}
    </div>
  </div>
</div>
```



# Dots Provide Context

```
<div ng-controller="Shell">
  {{ shell.name }}
  <div ng-controller="Customer">
    {{ customer.name }}
    <div ng-controller="Order">
      {{ order.name }}
    </div>
  </div>
</div>
```

# Considerations

**Dots provide clarity**

**Easier to reach the parent scope with \$parent.\$parent  
chaining**

**Remove unexpected behavior**

# Controller As and Testing





# Classic \$scope or Controller As



# Controller Patterns

## Syntactical Sugar

Dots help avoid pitfalls in bindings

Use \$scope members wisely (consider a factory)

Capture “this” to avoid context issues

```
var vm = this;
```

## Define Controller

in a View using ng-controller

In a Route

**Resolve functions in the routes work with both**

Resolve can be injected into Controller only when using Controller As