

# Warming Up With **ember.js**

## Level 5 - Controlling our Growth

Array Controllers



# Review

app.js

```
App.ProductsRoute = Ember.Route.extend({  
  model: function() {  
    return this.store.findAll('product');  
  }  
});
```



What about Sorting or Filtering?





Flint

Kindling

Matches

Bow Drill

Tinder

Birch Bark Shaving

Choose a product from those on the left!

How could we sort products?

# Sorting Models By Title

app.js

```
App.ProductsRoute = Ember.Route.extend({  
  model: function() {  
    return this.store.find('product', { order: 'title' });  
  }  
});
```



Tells our store how we want the product sorted



<http://example.com/products?order=title>





# Sorting at the Server vs Client

To have the server do the sorting

```
this.store.find('product', { order: 'title' });
```

*This will send our browser products already sorted.*

To have the client (or browser) do the sorting

we will have to sort in the **controller**.

## Controller



Decorate your applications data for the template.



# We Need a Special Controller

app.js

```
App.ProductsController = Ember.Controller.extend({});
```



We need a controller that knows how to deal with Arrays of objects.



# EmberController Variants

Ember.Controller

```
graph TD; A[Ember.Controller] --> B[Ember.ArrayController]; A --> C[Ember.ObjectController];
```

The diagram illustrates the inheritance hierarchy of Ember controllers. At the top is a brown box labeled 'Ember.Controller'. Two arrows point downwards from this box to two other boxes below it. The left box is green and labeled 'Ember.ArrayController'. The right box is brown and labeled 'Ember.ObjectController'. Below each box is a descriptive text: 'Decorates an Array' for the green box and 'Decorates a single Object' for the brown box.

Ember.ArrayController

Decorates an Array

Ember.ObjectController

Decorates a single Object





# Array Controller

If our model is an array, we should use an ArrayController.

app.js



```
App.ProductsController = Ember.ArrayController.extend({});
```

*This gives our Controller some special abilities.*





# Sorting by a Property

app.js

```
App.ProductsController = Ember.ArrayController.extend({  
  sortProperties: ['title']  
});
```



Sorts by the title of each product (in the browser)



# Sort Direction

By default this will sort ascending

A-Z

```
App.ProductsController = Ember.ArrayController.extend({  
  sortProperties: ['title']  
});
```



To sort descending

```
App.ProductsController = Ember.ArrayController.extend({  
  sortProperties: ['title'],  
  sortAscending: false  
});
```





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Choose a product from those on the left!

Products are now sorted by name

# Refactoring IndexController

We need to convert this to actually count the length of our models.

*Using Ember Data*

app.js

```
App.IndexController = Ember.Controller.extend({  
  productsCount: 6  
});
```



## Welcome to The Flint & Flame!



**Flint & Flame** Everything you need to make it through the winter.

[Browse All 6 Items »](#)





# Step 1 - Associate a Model

Set the appropriate model that the IndexController will use.

app.js

```
App.IndexController = Ember.Controller.extend({  
  productsCount: 6  
});
```

```
App.IndexRoute = Ember.Route.extend({  
  model: function() {  
    return this.store.findAll('product');  
  }  
});
```



# Switching Controller Type

app.js

```
App.IndexController = Ember.ArrayController.extend({  
  productsCount: 6  
});
```


The model is an array



# Computed Properties

app.js

```
App.IndexController = Ember.ArrayController.extend({  
  productsCount: function() {  
    return 6;  
  }.property()  
});
```



Convert productsCount to a function



# Getting the Model Length

app.js

```
App.IndexController = Ember.ArrayController.extend({  
  productsCount: function() {  
    return this.get('length');  
  }.property()  
});
```

This will first look for a property called length in the ArrayController.

Then it will delegate to the model, and call length on the model.

model.length






# Handlebars Property Binding

app.js

```
App.IndexController = Ember.ArrayController.extend({  
  productsCount: function() {  
    return this.get('length');  
  }.property('length')  
});
```



This will keep a watch on the 'length' property of the controller, and if it changes update productsCount

index.html

```
<script type='text/x-handlebars' data-template-name='index'>  
  <p>There are {{productsCount}} products</p>  
</script>
```



# Computed Alias

app.js

```
App.IndexController = Ember.ArrayController.extend({  
  productsCount: function() {  
    return this.get('length');  
  }.property('length')  
});
```



Functionally the same

app.js

```
App.IndexController = Ember.ArrayController.extend({  
  productsCount: Ember.computed.alias('length')  
});
```



