Knockout Observables

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Knockout Key Features

Introduction

Observables (3 types)

Built-in Bindings

Custom Bindings

Data Features

Observables

- **JavaScript** *functions*
  - Not all browsers support JavaScript getters/setters
- **Internally KO's bindings** *observe* **the observables**

```
// read a value
var name = viewModel.name();


// write a value
viewModel.name("Steve");
```

3 Types of Observables

observable	• Used for view model properties
observable arrays	• Used for collections
dependent observables	• Encapsulate one or more other observables

Dependent Observables

- **Encapsulate one or more observables**
- **Need to manage `this` pointer**

```
var viewModel = {
    firstName: ko.observable("Joe"),
    lastName: ko.observable("Blow")
};
viewModel.fullName = ko.dependentObservable(functon() {
    return this.firstName() + " " + this.lastName();
}, viewModel);
```

DEMO
Dependent Observables

Observable Arrays

- **Use with collections**

- **Detect changes to collection – add/remove**

- **Use Knockout array methods**
    - Cross browser
    - Dependency Tracking
    - Clean Syntax

Observable Array Methods

list.indexOf("value")	• Returns zero-based index of item
list.slice(2, 4)	• Returns items between start/end index
list.push("value")	• Adds new item to end
list.pop()	• Removes last item
list.unshift("value")	• Inserts item at beginning
list.shift()	• Removes first item
list.reverse()	• Reverses order
list.sort()	• Sorts the items
list.remove(item)	• Removes specified item
list.removeAll()	• Removes all items

Summary

Observables

Observable Arrays

Dependent Observables