**Add ViewModel**

var viewModel = {

firstName: ko.observable("Jaime"),

lastName: ko.observable("Sims")

}

viewModel.fullName = ko.dependentObservable(function(){

return this.firstName() + ' ' + this.lastName();

}, viewModel);

ko.applyBindings(viewModel);

**Add Friends**

function friend(name){

return {

name: ko.observable(name),

};

}

friends: ko.observableArray([new friend("Steve"), new friend("Annie")]),

addFriend: function(){

this.friends.push(new friend("Another"));

}

<div data-bind="template: 'friendsTemplate' "></div>

<script id="friendsTemplate" type="text/html">

<ul>

{{each(index, friend) friends}}

<li>${ friend.name } - ${ new Date } </li>

{{/each}}

</ul>

</script>

<button data-bind="click: addFriend">Add Friend</button>

**Update to use ‘foreach’ template binding**

<ul data-bind="template: {name: 'friendsTemplate2', foreach: friends}"></ul>

<script id="friendsTemplate2" type="text/html">

<li>

${ $data.name } - ${ new Date }

</li>

</script>

**Remove Friends**

**In friends template:** <button data-bind="click: remove">Remove</button>

**Add to friend model:**

remove: function(){

viewModel.friends.remove(this);

}

**Show Friends Count & Disallow Friends over 5**

<h2>Friends (<span data-bind="text: friends().length"></span>)</h2>

<button data-bind="click: addFriend, enable: friends().length < 5">Add Friend</button>

**Add Twitter Info**

function friend(name){

return {

name: ko.observable(name),

isOnTwitter: ko.observable(false),

twitterName: ko.observable(),

remove: function(){

viewModel.friends.remove(this);

}

};

}

<script id="friendsTemplate2" type="text/html">

<li>

<input data-bind="value: name"/>

<button data-bind="click: remove">Remove</button>

<label><input type="checkbox" data-bind="checked: isOnTwitter"/> Is on Twitter</label>

<input data-bind="value: twitterName, visible: isOnTwitter"/>

</li>

</script>

**Add Save**

<button data-bind="click: save">Save</button>

var viewModel = {

firstName: ko.observable("Jaime"),

lastName: ko.observable("Sims"),

friends: ko.observableArray([

new friend("Steve"),

new friend("Annie")]),

addFriend: function(){

this.friends.push(new friend("Another"));

},

save: function(){

var json = ko.toJSON(this);

console.log(json);

}

}

**TODO APP**

Show keyup event.

<input data-bind="value: firstName, valueUpdate:'afterkeydown'" />