Knockout Training Syllabus

Instructor: **Daniel Lewis**

Start: 9:00am End: 4:00pm

# Pre Reqs:

Students should bring a laptop and be prepared to actively participate in the class. A basic understanding of HTML and Javascript is all that is needed in terms of knowledge.

Students should install the following items on their laptops prior to class:

Node.js (<http://nodejs.org/>)

Any html / javascript editor. If you do not already have one on your machine you know and love here are a few free choices:

* Brackets (<http://brackets.io>)
* Notepad++ (<http://notepad-plus-plus.org/>)
* Sublime Text (<http://www.sublimetext.com/>)

The GitHub repository with the course work:

<https://github.com/sympletech/KnockoutJSCourse>

# Course Outline

* Lean Coffee as we let everyone arrive (30 mins)
* Speaker / Class Introductions (15 mins)
* Setting up personal dev environments (15 mins)
* -- 10am
* Introduction to KnockoutJS (15 mins)
  + The Problem – js bound to the DOM
  + The Pattern – MVVM
  + Why choose Knockout over other similar libraries
* Basic Class Format (15 mins)
  + Koans – How we will be learning today
  + Post-its, sharpies, and standups – How we will reflect on what we’re learning.
* Defining the basic Structure of a knockout Application(10 mins)
  + Creating the view
  + Creating the view model
  + Adding a data-binding between the two
* Koan - Defining the basic Structure of a knockout Application (10 mins)
* Break (10 mins)
* -- 11am
* The Basic Bindings (10 mins)
  + text
  + html
  + css
  + style
  + attr
* Koan - The Basic Bindings (15 mins)
* The Input Bindings (10 mins)
  + value
  + checked
  + hasfocus
  + options
  + selected options
* Koan - The Input Bindings (15 mins)
* Class Reflection (10 mins)
* -- 12pm
* Lunch (35 mins)
* Actions (10 mins)
  + Click
  + Submit
  + Event
* Koan – Actions (15 mins)
* -- 1pm
* Collections (5 mins)
  + Observable Arrays
  + ForEach
  + Click
* Child ViewModels(5 mins)
  + with binding
* Koan – Collections and Child ViewModels (15 mins)
* Templates (10 mins)
  + How they work
  + Passing data to them
* Koan –Templates (15 mins)
* Break (10 mins)
* -- 2pm
* More Advanced Collections (30 mins)
  + The meat of good applications
  + Collections within collections with collections of relationships
  + Linked select lists
  + Linked Templates
* Koan - More Advanced Collections (20 mins)
* Class Reflection (10 mins)
* Break (10 mins)
* --3pm
* Talking to webservices (10 mins)
  + Making ajax calls (using jquery)
  + Filling view model properties
  + Model Binding
  + Sending data back to the server
* Koan - Talking to webservices (15 mins)
* Course Recap (15 mins)
* Class Retrospective (15 mins)