
DAY 1: JAVASCRIPT FOR BEGINNERS

9:00 AM	Overview <ul style="list-style-type: none">• Course goals and objectives• Configuration and logistics• What to expect when developing Ajax
9:15 AM	ACTIVITY: Setting up Your Environment
9:30 AM	JavaScript Overview <ul style="list-style-type: none">• Syntax: braces, whitespace, data types, declaring literals• Variables• Control structures• Operators and truthiness
9:45 AM	Built-In Objects <ul style="list-style-type: none">• Dictionaries and lists• Functions in JavaScript
10:00 AM	ACTIVITY: JavaScript Code Analysis
10:30 AM	Adding JavaScript to Your Page <ul style="list-style-type: none">• The script tag• File paths
10:45 AM	Debugging Ajax Apps <ul style="list-style-type: none">• An introduction to debugging JavaScript• Firebug and other debugging tools• Using Firebug to inspect the page• Programming in an IDE
11:00 AM	Break
11:15 AM	Objects in JavaScript <ul style="list-style-type: none">• Scope and context• Namespacing and simple lookups• Instantiation• Mutability
11:30 AM	JavaScript Functions in Depth <ul style="list-style-type: none">• Closures• Functional programming
12:00 PM	Advanced OO

- Prototypes
- Constructor functions
- Mixins

12:30 PM **ACTIVITY: Simple OO**

DAY 2: MORE JAVASCRIPT AND DOJO FOR BEGINNERS

9:00 AM **Morning Recap**

- Review of the previous day

9:15 AM **Refreshers**

- HTML refresher
- CSS refresher

9:30 AM **Intro to the DOM**

- DOM overview
- Node hierarchy

10:00 AM **The Gaps**

- Ajax
- CSS
- Node lookup
- Node placement
- Node attributes
- Event handling
- Animation
- CSS Reset
- Packaging
- Missing APIs
- Forward-looking APIs

10:15 AM **Toolkit Overview**

- Toolkit goals
- Common toolkit functionality

10:30 AM **Introduction to Dojo**

- Major components and a broad overview of capabilities
- Getting started: Dojo configuration and setup
- Dojo code structure
- API documentation and Dojo Book
- SitePen's Dojo Toolbox

10:45 AM **Break**

11:00 AM **ACTIVITY: Dojo Configuration and Setup**

- 11:30 AM** **Activity Tool Introduction**
- SitePen’s activity tools
- 12:00 PM** **Dojo Fundamentals**
- Dojo's package system
 - Base tools (dojo.trim, etc.)
 - Project configuration
- 12:30 PM** **ACTIVITY: Dojo Base**

DAY 3: DOJO IN DEPTH

- 9:00 AM** **Morning Recap**
- Review of the previous days
- 9:15 AM** **Document Object Model (DOM) with Dojo**
- Dojo's DOM APIs
 - dojo.attr
 - dojo.place
 - dojo.style
 - dojo.html
- 9:45 AM** **Events with Dojo**
- Using callbacks in Dojo
 - Event listeners with dojo.connect
- 10:15 AM** **Dojo’s CSS Selection Engine**
- dojo.query
 - dojo.behavior
- 10:45 AM** **Writing Plugins**
- Custom plugins with dojo.NodeList
- 11:00 AM** **Break**
- 11:15 AM** **ACTIVITY: Custom dojo.query Plugin**
- 11:45 AM** **Intro to Ajax**
- Classic web architecture vs. rich web applications
 - Ajax methods (Why we like XMLHttpRequest)
 - Data serialization (JSON vs. XML)
- 12:00 PM** **Ajax with Dojo**
- Dojo's Ajax APIs
 - Deferred use in Dojo

12:30 PM **ACTIVITY: Ajax with Dojo**

DAY 4: DIJIT FOR BEGINNERS

- 9:00 AM** **Morning Recap**
- Review of the previous days
- 9:15 AM** **Object Oriented Code**
- Fundamentals of dojo.declare
 - Mixins
 - OO in addition to dojo.declare
- 9:30 AM** **Dijit: the Dojo Widget System**
- The dijit._Widget superclass and the widget lifecycle
 - Dijit mixins
 - Dijit themes
- 9:45 AM** **Templating with Dijit**
- Writing templates: Custom attributes and variables
 - URLs in Dojo
 - Separating widget components
 - How templates become DOM
 - Template alternatives: dojox.dtl
- 10:15 AM** **ACTIVITY: Using Dijit**
- 10:45 AM** **Break**
- 11:00 AM** **Dojo Data**
- Understanding the Dojo Data APIs
 - Using a data store
 - Writing a data store
- 11:30 AM** **Dijit Sections**
- Layout Widgets
 - Form Widgets
 - Editor
 - Tree
- 12:00 PM** **Unit Testing in Dojo**
- Using the Dojo Objective Harness (doh) for unit testing
 - Testing methods
- 12:15 PM** **What's in DojoX**
- GFX
 - Charting
 - Grid

12:45 PM

Final Q&A