<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM</td>
<td>Overview</td>
</tr>
<tr>
<td></td>
<td>• Course goals and objectives</td>
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<tr>
<td></td>
<td>• Configuration and logistics</td>
</tr>
<tr>
<td></td>
<td>• What to expect when developing Ajax</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>ACTIVITY: Setting up Your Environment</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>JavaScript Overview</td>
</tr>
<tr>
<td></td>
<td>• Syntax: braces, whitespace, data types, declaring literals</td>
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<tr>
<td></td>
<td>• Variables</td>
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<tr>
<td></td>
<td>• Control structures</td>
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<td>• Operators and truthiness</td>
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<tr>
<td>9:45 AM</td>
<td>Built-In Objects</td>
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<tr>
<td></td>
<td>• Dictionaries and lists</td>
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<td>• Functions in JavaScript</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>ACTIVITY: JavaScript Code Analysis</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>Adding JavaScript to Your Page</td>
</tr>
<tr>
<td></td>
<td>• The script tag</td>
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<td>• File paths</td>
</tr>
<tr>
<td>10:45 AM</td>
<td>Debugging Ajax Apps</td>
</tr>
<tr>
<td></td>
<td>• An introduction to debugging JavaScript</td>
</tr>
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<td></td>
<td>• Firebug and other debugging tools</td>
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<tr>
<td></td>
<td>• Using Firebug to inspect the page</td>
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<td></td>
<td>• Programming in an IDE</td>
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<tr>
<td>11:00 AM</td>
<td>Break</td>
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<tr>
<td>11:15 AM</td>
<td>Objects in JavaScript</td>
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<tr>
<td></td>
<td>• Scope and context</td>
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<td>• Namespace and simple lookups</td>
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<td>• Instantiation</td>
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<td>• Mutability</td>
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<tr>
<td>11:30 AM</td>
<td>JavaScript Functions in Depth</td>
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<tr>
<td></td>
<td>• Closures</td>
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<tr>
<td></td>
<td>• Functional programming</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Advanced OO</td>
</tr>
</tbody>
</table>
• 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
    o dojo.attr
    o dojo.place
    o dojo.style
    o 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
  o dojo.query
  o dojo.behavior

10:45 AM Writing Plugins
  o 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