

## **Ajax - Asynchronous JavaScript and XML - overview**

- Web Applications - Pre and Post Ajax
- Ajax in the Real World
- Alternatives to Ajax

## **XML In A Nutshell**

- Syntax
- Rules

## **JavaScript In A Nutshell**

- Primitive Data Types and Reference Types
- Variables
- Loops
- Function Definition and Function Call
- Objects
- Expressions, Operators and Escape Sequences

## **Document Object Model (DOM)**

- Window Object
- HTML & XML DOM
- Node
- Element
- Accessing Element Nodes
- Inner HTML
- Properties of Element and Text Nodes
- Node Attributes
- Node Name & Node Value
- Event Handling
- Key Word - this
- Whitespace Interpretation - Browser Differences
- Removing Nodes
- Creating New Nodes
- Node Methods

## **XMLHttpRequest Object**

- XMLHttpRequest Instantiation
- XMLHttpRequest open() Method
- Asynchronous vs. Synchronous Requests
- Callback Function

- ready State

### **CSS In A Nutshell**

- Syntax
- Units
- Selectors
- Positioning properties
- float Property
- Types of Positioning
- 3D

### **XML and Ajax**

- Creating a DOM Document with JavaScript
- load XML
- Receiving XML Responses from the Server
- Passing XML to the Server
- Different Server Side Technologies - an overview

### **Frameworks and Toolkits - an overview**

- Some Popular Frameworks - in brief

### **Object-Oriented JavaScript**

- Multiple Simultaneous Asynchronous Requests
- Prototype
- Extending Built-in Objects
- Object-Oriented XMLHttpRequest
- Refactoring the Creation and Handling of XMLHttpRequest

### **Model-View-Control (MVC)**

- Design Patterns
- MVC Examples
- Ajax Web Application

### **JavaScript Object Notation (JSON)**

- JavaScript Object and Array Creation Using Literals
- JavaScript Objects in Arrays & Arrays in Objects
- JSON Syntax
- JSON Parsers
- JSON Data Transfer Between Client and Server

- Autosuggest example

## **XSLT**

- Overview
- XSLT in the Browsers
- Sarissa
- Advantages and Disadvantages

## **XPath**

- Overview

## **Drag and Drop**

- Overview
- Scriptaculous
- Drag gable Options
- Droppable
- Drag and Drop, Ajax and Scriptaculou