

AIR : Building Desktop Applications with AJAX

Description

AIR : Building Desktop Applications with AJAX is a two day course designed to equip web developers who have experience with AJAX technologies with the skills needed to develop robust desktop applications using the Adobe Integrated Runtime. This course focuses on the toolset available to HTML and Javascript developers.

Course length

Two days

Audience

People with experience in building HTML web applications with CSS and custom-written Javascript. Familiarity with AJAX (asynchronous Javascript and XML) techniques will enhance your learning the class.

Course Outline

Unit 1 : Introducing the course

- Introducing Mastery Learning
- Understanding the course format
- Reviewing the course prerequisites
- Reviewing the course outline

Unit 2 : Introducing the Adobe Integrated Runtime

- Exploring the AIR development Toolset < runtime the>
- Understanding the AIR SDK
- Looking at Dreamweaver
- Reviewing the AIR tools for Dreamweaver
- Creating AIR Sites
- Exporting AIR Applications
- Walkthrough: Review the course application

Unit 3 : Getting started with AIR

- Creating your first AIR application
- Creating an AIR project
- Walkthrough: Create your first AIR application
- Creating an AIR application in Dreamweaver
- Creating a Site

- Creating a new AIR application in Dreamweaver
- Launching Your AIR application in Dreamweaver
- Walkthrough: Create an AIR application with Dreamweaver
- Packaging and deploying applications
- Using the Air Application Settings Wizard
- Selecting application content
- Code-signing an application
- Exporting an application
- Installing an application
- Walkthrough: Export and install application
- Understanding the contents of the .air file
- Exploring the AIR file format
- Understanding the application descriptor
- Understanding the application display attributes
- Walkthrough: Examine the AIR package
- Learning AIR Fundamentals
- Understanding the application container
- Functionality of AIR
- Accessing AIR Features from Javascript
- Getting Debugging Information

- Extending the Runtime with ActionScript
- Walkthrough: Create an AIR application with Javascript
- Getting help and other resources

Unit 4 : Using the File System

- Using the File class
- Introducing the file class
- Accessing common directories
- Allowing user to specify files or directories
- Walkthrough: Browsing the file system with the File class
- Interacting with the file system
- Referencing a file or directory
- Creating directories
- Moving and copying file system objects
- Removing file system objects
- Walkthrough: Copy, move and delete file objects
- Using file streams
- Reading and Writing Files
- Walkthrough: Read and write a file
- Working with files asynchronously
- Compare synchronous and asynchronous methods
- Walkthrough: Read a file asynchronously

Unit 5 : Creating Native Windows

- Exploring the types of windows
- Customizing properties of the window
- Walkthrough using window.open()
- Using the NativeWindow class
- Adding content to a window
- Walkthrough: Create a native window
- Manipulating windows
- Resizing a window
- Moving a window
- Walkthrough: Resize and move a window
- Using window events
- Using addEventListener()
- Identifying the window events
- Walkthrough: Listen for window event

LAB Day 1 & 2

Persisting Application Data

- Using an embedded SQL databases
- Understanding the database file
- Opening a database
- Creating a database
- Walkthrough: Create a new database
- Using SQL statements
- Managing the database
- Managing the data
- Using best practices with embedded databases
- Walkthrough: Update database and records
- Working with data types
- Using Date data type
- Using XML data type
- Using BLOB data type
- Walkthrough: Use date/time data

Using the clipboard

- Moving data with copy and paste
- Understanding the Clipboard
- Using the generalClipboard
- Getting data from the clipboard
- Writing data to the clipboard
- Walkthrough: Moving data with copy and paste
- Using drag-and-drop
- Exploring the drag and drop stages
- Dragging with the clipboard
- Walkthrough: Drag an image into the application

Connecting Applications

- Communicating between applications
- Using LocalConnection
- Walkthrough: Connect to another AIR application
- Detecting network availability
- Monitoring network state changes
- Detecting HTTP connectivity
- Detecting Socket connectivity
- Walkthrough: Using network detection
- Connecting to web applications using URLRequest
- Requesting a URL via HTTP
- Using the URLRequest class

- Using the URLVariables class
- Using the URLoader class
- Walkthrough: Using the URLRequest Object

Understanding AIR Security

- Considering AIR security
- Learning about security sandboxes
- Understanding the domain considerations
- Understanding the need for Security Sandboxes
- Implementing Security Sandboxes
- Implementing the sandbox bridge
- Walkthrough: Create a security sandbox
- Understanding application updates
- Walkthrough: Update an application

Customizing Application Deployment

- Setting the application's desktop icon
- Using application icons
- Walkthrough: Add icon to application
- Using system tray icons
- Walkthrough: Adding a system tray icon

Summary and Review