

AIR : Building Desktop Applications with Flex 3

Description

This course is designed to equip experienced Adobe® Flex™ developers with the skills needed to begin developing robust desktop applications using Adobe AIR™.

Course length

Two days

Audience

People who have followed the *Flex 3: Developing Rich Client Applications* course, or equivalent experience developing Flex applications

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 Adobe AIR

- Exploring the Adobe AIR development toolset
- Understanding the runtime application
- Understanding the Adobe AIR SDK
- Looking at Adobe Flex Builder™ 3
- Reviewing the Adobe AIR tools for Flex Builder 3
- Creating Adobe AIR projects
- Exporting Adobe AIR applications
- Walkthrough: Review the course application

- Walkthrough: Create an Adobe AIR application
- Packaging and deploying applications
- Exporting an application
- Code-signing an application
- Selecting application content
- Installing an application
- Walkthrough: Export and install application
- Learning Adobe AIR fundamentals
- Understanding the application container
- Exploring the Adobe AIR file format
- Understanding the application descriptor
- Understanding the application display attributes
- Walkthrough: Examine the Adobe AIR package and change its descriptor
- Getting help and other resources

Unit 3 : Getting started with Adobe AIR

- Creating your first Adobe AIR application
- Creating an Adobe AIR project
- Creating a main application
- Compiling an Adobe AIR application
- Running an Adobe AIR application

Unit 4 : Creating native windows

- Creating a window
- Using the Window class
- Adding content to a window
- Walkthrough: Create, open, and close a native window
- Modifying the window display
- Changing the window type
- Changing the window chrome
- Setting window transparency
- Going full screen
- Walkthrough: Control chrome, transparency, and full screen
- Manipulating windows
- Getting an instance of the window
- Resizing a window
- Moving a window
- Walkthrough: Maximize, minimize, restore, and move a window
- Using window events
- Identifying the window events
- Walkthrough: Control window behavior through event listeners

Unit 5 : Using the file system

- Using the File class
- Using the File class
- Creating directories
- Walkthrough: Creating directories and files
- Moving and copying file system objects
- Deleting file system objects
- Walkthrough: Copy, move, and delete file objects
- Using the Flex 3 Adobe AIR components
- Reviewing the component types
- Walkthrough: Use file browsing and display components
- Using file streams
- Creating directories
- Reading and writing files
- Walkthrough: Read and write to a text file
- Working with file formats
- Using binary and encoded characters
- Walkthrough: Read, modify, and write a binary file to the desktop

Unit 6 : Connecting applications

- Communicating between applications
- Using LocalConnection
- Walkthrough: Connect to another Adobe AIR application
- Communicating with the browser
- Using the URLRequest class
- Walkthrough: Interact with a remote service via URL
- Using HTML content
- Loading HTML content
- Walkthrough: Load HTML into an Adobe AIR application
- Getting occasionally connected
- Monitoring services
- Detecting HTTP connectivity
- Detecting Socket connectivity
- Walkthrough: Add network detection
- Using the barcode object in a form

LAB Day 1 & 2 Building an AIR application.**Using the clipboard**

- Moving data with copy and paste
- Using the clipboard
- 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

Persisting application data

- Using 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
- Using XML data
- Using BLOB data
- Walkthrough: Use date/time and BLOB data

Understanding Adobe AIR security

- Considering Adobe AIR security
- Learning about security sandboxes
- Understanding the domain considerations
- Detecting Adobe AIR capabilities
- Understanding the security best practices
- Walkthrough: Add capability detection
- Using Encrypted Local Storage
- Walkthrough: Using encrypted local storage
- Understanding AIR application updating
- Using the Updater class
- Determining current version at runtime
- Walkthrough: Preventing downgrade attacks while updating an AIR application

Customizing application deployment

- Setting the application's desktop icon
- Using application icons
- Walkthrough: Add icon to application
- Setting system tray notifications
- Using the shell
- Walkthrough: Add a system tray icon
- Customizing application chrome
- Understanding application chrome
- Walkthrough: Change application chrome