



AIR: Building Desktop Applications with Flex 3.0

Duration: 2 Days | 16 Hrs.

This course is designed for application developers who want to build desktop applications, which can connect to the internet, using technologies like Flex. To gain the most from this class, you should:

- Have attended the Flex 3: Level 1 - Developing Rich Client Applications course.
- Have knowledge of basic Database operations.



Course Outline

Unit 1: Introducing Adobe Integrated Runtime (AIR)

- Exploring the AIR development toolset
- Understanding the runtime application
- Understanding Adobe AIR 1.5
- Understanding the Adobe AIR SDK
- Looking at Flex Builder 3
- Reviewing the Adobe AIR tools for Flex Builder 3
- Creating AIR projects
- Exporting AIR applications

Unit 2: Getting started with AIR

- Creating your first AIR application
- Creating an AIR project
- Creating a main application
- Compiling an AIR application
- Packaging and deploying applications
- Exporting a release
- Code-signing an application
- Selecting application contents
- Installing an application
- Uninstalling an AIR application
- Understanding AIR fundamentals
- Introducing the AIR file format
- Introducing the application descriptor
- Getting help and other resources
- Help inside Flex Builder
- Documentation
- AIR URLs



Unit 3: Creating Native Windows

- Creating windows
- Defining a window with MXML
- Instantiating an MXML window with ActionScript
- Opening and closing window components
- Modifying the window display
- Changing the window chrome
- Changing the window type
- Setting window transparency
- Controlling display of default Flex chrome
- Using full screen display
- Manipulating windows
- Referring to a window object
- Manipulating a window
- Controlling the main application appearance
- Configuring initial appearance and behavior
- Understanding component display order
- Controlling window behavior using window events
- Handling window events

Unit 4: Using the File System

- Using the File class
- Accessing common directories
- Referencing a file or directory
- Moving and copying file system objects
- Enabling visual file system interaction
- Allowing user to specify files or directories
- Introducing the Flex 3 file browsing components
- Removing files from the file system
- Determining the File object type
- Recycling or deleting file system objects
- Using file streams
- Reading and writing files
- Working with binary data
- Using the ByteArray class
- Reading binary data
- Writing binary data



Unit 5: Connecting Applications

- Communicating between applications
- Using the LocalConnection class
- Connecting to web applications using URL Requests over HTTP
- Requesting a URL via HTTP
- Using the URLRequest class
- Using the URLVariables class
- Using the URLLoader class
- Using the Base64Encoder class
- Displaying HTML content
- Understanding the HTMLLoader class
- Using the <mx:HTML /> component
- Detecting network availability
- Monitoring network state changes
- Detecting HTTP resource availability
- Detecting Socket connectivity

Unit 6: 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
- Using drag and drop
- Exploring the drag and drop stages
- Understanding how dragged data is transferred

Unit 7: Persisting Application Data

- Using an embedded SQL database
- Understanding the database file
- Opening a database
- Creating a database
- Using SQL statements
- Managing the database
- Managing the data
- Using best practices with local databases
- Working with SQL data types
- Using Date data
- Using XML data
- Using BLOB data
- Using query parameters
- Saving and retrieving binary image data



Unit 8: Understanding AIR Security

- Considering AIR security
- Introducing AIR security
- Introducing security sandboxes
- Introducing AIR security best practices
- Detecting AIR capabilities
- Using the Capabilities object
- Using encrypted data storage
- Understanding AIR application updating
- Using the Updater class
- Determining current version at runtime
- Encrypting local database files
- Implementing database encryption

Unit 9: Customizing Deployment

- Setting the application's desktop icon
- Using application icons
- Setting system tray icon
- Addressing the nativeApplication
- Using the system tray