

70-566 - Upgrade: Transition Your MCPD Windows Developer Skills to MCPD Windows Developer 3.5 Instructor: Peter Thorsteinson (C#)

Course Introduction

4m

Course Introduction

Chapter 01 - Windows Forms and Controls

2h 34m

Overview

Windows Forms

Demo - Windows Forms

Demo - Non-Rectangular Forms

Standard Controls

Discussion - Standard Controls

Control Layout

Demo - Managing Control Layout

Menus

Demo - Main Menu Class

Demo - Menu Strip Class

Demo - Context Menu Strip Class

Demo - Context Menu Class

Demo - Tool Strip Control Host Class

Demo - Creating Toolstrips

Form and Control Events

Discussion - Form and Control Events

Mouse Events

Keyboard Events

Demo - Mouse and Keyboard Events

Data-Bound Controls

Demo - Data-Bound Controls

DataGridView

Demo - DataGridView

Common Dialogs

Demo - Common Dialogs

Custom Dialogs

Demo - Custom Dialogs

SDI and MDI Applications

MDI Forms

Demo - MDI Applications and Forms

Forms Inheritance

Demo - Forms Inheritance

Chapter 01 - Review

Chapter 02 - ADO.NET

2h 15m

Overview

ADO.NET Architecture

Object Model

Two Alternatives

Isolation Levels

SqlConnection Object

SqlCommand Object

Connected Data Access

Connected Data Access - Code Example

Demo - ExecuteReader

Demo - ExecuteScalar
Demo - ExecuteNonQuery
Demo - ExecuteXmlReader
Demo - Stored Procedures
Transactions
Transaction Steps
Demo - Transactions
Disconnected Data Access
Fill Method
DataAdapter
Disconnected Data Access - Code Example
Demo - Disconnected Data Access
Table Relationships
Creation
Navigation
Demo - Relationships
CommandBuilder
Demo - CommandBuilder
DataView
Demo - DataView
BindingSource
Demo - BindingSource
LINQ
Demo - LINQ
Connection Pooling
Chapter 02 - Review

Chapter 03 - XML Data

1h 10m

Overview
XML Concepts
Additional XML Concepts
DataSet to XML
DataSet to XML Code
Demo - DataSet to XML
Transforming XML with XSLT - Concept
Transforming XML with XSLT - Code
Demo - Transforming XML with XSLT
LINQ to XML
Demo - LINQ to XML
XML IO - Reading
XML IO - Writing
Demo - XML IO
XPath
XPathNavigator
Demo - XPath Query
Demo - XPathNavigator Tree View
XML DOM
Demo - XML DOM
Chapter 03 - Review

Chapter 04 - Printing

38m

Overview
Print Components and Controls
PrintDocument
Demo - PrintDocument
PrintDialog

Demo - PrintDialog
PrintPreviewDialog
Demo - PrintPreviewDialog
PageSetupDialog
Demo - PageSetupDialog
PrintInBackgroundDelegate
Demo - PrintInBackgroundDelegate
Chapter 04 - Review

Chapter 05 - Usability

2h 58m

Overview
Graphic Output
Demo - Graphic Output
Globalization and Localization
Defining
Dates
Numerics
Comparing
Demo - Globalization and Localization
User Assistance Controls and Components
Demo - User Assistance Controls
Usability
Drag-and-drop
Clipboard
Demo - Drag-and-drop & Clipboard Operations
Persisting Application Settings
Demo - Persisting Application Settings
Custom Controls
Demo - Composite Custom Controls
Demo - Derived Custom Controls
Demo - Full Custom Controls
Interoperability
Demo - COM Interoperability Client
Demo - PInvoke
Chapter 05 - Review

Chapter 06 - Asynchronous Programming

1h 36m

Overview
Thread Class
Demo - Thread Class
Asynchronous Delegates
Demo - Asynchronous Delegates
Event-Based Asynchronous Pattern
Demo - Event-Based Asynchronous Pattern
BackgroundWorker Component
Demo - BackgroundWorker Component
Thread-Safety Issues
Demo - Thread-Safety Issues
Synchronization Objects
Demo - Synchronization Objects
ThreadPool Class
Demo - ThreadPool Class
User Interface Threads
Demo - User Interface Threads
Chapter 06 - Review

Chapter 07 - Custom Dialogs and Controls

52m

Overview
Modal Dialogs
Modal Dialog Properties
Modeless Dialog
Modeless Dialog Properties
Demo - Custom Dialogs
Composite Controls
Implementing a Composite Control
Demo - User Dialogs
Extended Controls
Creating and Using an Extended Control
Demo - Extended Controls
Custom Controls
Implementing and Using a Custom Control
Demo - Custom Controls
Chapter 07 - Review

Chapter 08 - Deployment

1h 6m

Overview
Deployment Options
Comparisons
Windows Installer
Windows Installer Options
Configuring the Setup Project
Demo - Windows Installer
ClickOnce Concepts
ClickOnce Publishing Wizard
ClickOnce Programming
Demo - ClickOnce
Chapter 08 - Review

Chapter 09 - Security

2h 24m

Overview
STRIDE
Cryptographic Algorithms
Symmetric Cryptography
Demo - Symmetric Cryptography
Asymmetric Cryptography
Demo - Asymmetric Cryptography
Digital Signatures and Certificates
Certs
X509Certificates
MakeCert.exe
Cert2spc.exe
Info
Demo - Creating a Digital Signature
Cryptographic Hashing
Hash Algorithms
Demo - Cryptographic Hashing
Win32 Access Control
Permissions
Demo - Win32 Access Control
Permissions and Code Groups
Security Actions

Configuration
Role-Based Security
Demo - User-Based Security
Code Access Security
Demo - Code Access Security
Security Auditing
Local Security Policy
Events
Demo - Security Auditing
Isolated Storage
Demo - Isolated Storage
Chapter 09 - Review

Chapter 10 - Error Handling and Performance

1h 1m

Overview
Event Logging - Code Example
Event Viewing
Reading the Event Log - Code Example
Demo - Event Logging
Debug and Trace Objects
Enabling Debug/Trace in Debug Mode
Enabling Debug/Trace in Release Mode
Trace and Debug Methods
Trace Output - Code Example
Results
Trace Listener - Code Example
Event Log Trace Listener - Code Example
Event Log Result
Event Log Trace Listener Configuration
Boolean Switch Configuration
Boolean Switch - Code Example
Trace Switch Configuration
Trace Switch - Code Example
Demo - Debug and Trace
Set Performance Counters - Code Example
Read Performance Counters - Code Example
Demo - Performance Counters
Dispose Pattern
Demo - Dispose Pattern
Chapter 10 - Review
Course Closure

Total Duration: 16h 40m