70-563 (VB) - Pro: Designing and Developing Windows Applications Using the Microsoft .NET Framework 3.5

Course Introduction 4m

Course Introduction

Chapter 01 - Windows Forms and Controls 2h 49m

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 19m

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 18m
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 35m
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Print Components and Controls
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Demo - PrintDocument
PrintDialog
Demo - PrintDialog
PrintPreviewDialog

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

Chapter 05 - Usability 2h 58m
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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 43m
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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 - Deployment 1h 7m

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 07 - Review

Chapter 08 - Security 2h 25m

Overview
STRIDE
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Symmetric Cryptography
Demo - Symmetric Cryptography
Asymmetric Cryptography
Demo - Asymmetric Cryptography
Digital Signatures and Certificates
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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 08 - Review

Chapter 09 - Error Handling and Performance 1h 4m

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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
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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
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Dispose Pattern
Demo - Dispose Pattern
Chapter 09 - Review
Course Closure

Total Duration: 16h 22m