

Windows Communication Foundation Class

Instructor Notes

Text book: *Learning WCF* by Michele Bustamante, O'Reilly and *RESTful .NET: Build and Consume RESTful Web Services with .NET 3.5* by Jon Flanders, O'Reilly

Course Title: *Windows Communication Foundation*

This ten-meeting instructor-led course provides students with the knowledge and skills to build and configure a Windows Communication Foundation (WCF) solution. This Course provides information on the basic WCF inter-process communication including covering the following topics: SOAP 1.1/2.0, MSMQ, HTTP/HTTPS, Tcp, Pipe, REST, Transactions, and Peer-to-peer. Details of .Net 3.0, 3.5 SP1, and .Net 4.0 will be included. This course is intended for application developers who know how to build applications in .Net using Visual Studio in either C# or VB.Net and how to use the common features of the base class library. Students can be successful in this course WITHOUT prior knowledge of advanced WS-*, WSE, service lifecycle management, and diagnostics.

Prerequisites: Before attending this course, students should have intermediate experience developing applications using .Net 2.0. Prior experience developing or consuming Web Services is not required.

Meeting Timeline

Meeting 01

- Module 01 Intro
- Module 02 key language topics and tools
- Module 03 First WPF Application (without using Visual Studio project templates)
- Reading: Bustamante: Chapters 1; MSDN: help topics for language features
- Lab

Meeting 02

- Module 04: Contracts: Service, Data, and Message
- Reading: Bustamante: Chapter 2

Meeting 03

- Module 05: Bindings
- Reading: Bustamante: Chapters 3
- Lab

Meeting 04

- Module 06 Hosting

- Reading: Bustamante: Chapters 4
- Lab

Meeting 05

- Module 07 Instance Management: lifetime, state, and concurrency
- Reading: Bustamante: Chapters 5
- Lab

Meeting 06

- Module 08 Reliability: Transactions and queued messages
- Reading: Bustamante: Chapters 6
- Lab

Meeting 07

- Module 09 Security
- Reading: Bustamante: Chapters 7
- Lab

Meeting 08

- Module 10 Exceptions and Faults
- Reading: Bustamante: Chapters 8
- Lab

Meeting 09

- Module 11 Debugging and Diagnostics
- Module 12 REST support in .Net 3.5 SP1
- Reading: Flanders: chapters 1,2
- Lab

Meeting 10

- Module 13 Read only and Write only services
- Module 14 Hosting Restful Web Services
- Reading: Flanders: chapters 3,4,5
- Lab