Exploring Visual Studio 2010 Using Visual C#

Meet the expert: Ken Getz is a featured instructor for several of our Visual Studio courses. He is a Visual Basic and Visual C# expert and has been recognized multiple times as a Microsoft MVP. Ken is a seasoned instructor, successful consultant, and the author or co-author of several best-selling books. He is a frequent speaker at technical conferences like Tech-Ed, VSLive, and DevConnections and he has written for several of the industry's most-respected publications including Visual Studio Magazine, CoDe Magazine, and MSDN Magazine.

Robert Green is a Visual Studio expert and a featured instructor for several of our Visual Basic and Visual C# courses. He is currently a Technical Evangelist in the Developer Platform and Evangelism (DPE) group at Microsoft. He has also worked for Microsoft on the Developer Tools marketing team and as Community Lead on the Visual Basic team. Robert has several years of consulting experience focused on developer training and is a frequent speaker at technology conferences including TechEd, VSLive, VSConnections, and Advisor Live.

Prerequisites: This course assumes that students have some programming background and experience using Visual Studio 2008. Because this course focuses solely on new features in Visual Studio 2010, its content will best be appreciated by developers who are fluent using Visual Studio 2008, and simply want to discover the new features added in Visual Studio 2010. The course assumes knowledge of a CLS language (Visual Basic or Visual C#), of the .NET Framework 3.5, and Visual Studio 2010.

Runtime: 11:37:49

Course description: Visual Studio 2010 adds a large set of new functionality for the Visual Studio developer. From new language features, including dynamic language support to full support and tooling for developing Silverlight applications, Visual Studio 2010, and the .NET Framework 4.0, make it easier than ever to create robust, enterprise-level applications. This course introduces the most important new features in Visual Studio 2010 for experienced Visual Studio developers.

Course outline:

IDE Features
- Introduction
- Huge List of New Features
- Two Faces of VS 2010
- VS as an Editor
- General Improvements
- Demo:Start Page
- Demo:Extension Manager
- UI Improvements
- Zoom
- Docking Windows
- Generate from Usage
- Highlighting References
- Navigate To/Quick Search
- Box Selection
- IntelliSense FirstMode
- Search Add New Item
- Demo:UI Improvements
- Debugging Improvements
- Floating Data Tips
- Threading
- Demo:Debug Improvements
- C# only IDE Features
- Call Hierarchy
- Organize Using Statements
- Demo:C# IDE Features
- Summary

Language Features
- Introduction
- C#-Only Features
- Named/Optional Parameters
- Demo:Named/Optional Paras
- Dynamic Type
- COM Interop Support
- Ref Parameters
- Demo:Dynamic Operations
- Demo:COM Interop
- Parallel Language Features
- Parallel Static Class
- PLINQ
- Demo:Parallel Processing
- Demo:LINQ/PLINQ
- Dynamic Language Features
- Call IronPython Method
- Demo:Dynamic Class
- Demo:IronPython Method
- Generic Variance
- Covariance Explained
- Contravariance Explained
- Demo:Covariance
- Demo:Contravariance
- Summary

Web Designer Enhancements
- Introduction
- Enhancements
- Web Templates
- Demo:New Web Templates
- HTML/JScript Snippets
- JScript IntelliSense
- Demo:Snippets/Intellisense
- Summary

Core Services
- Introduction
- ASP.NET Core Services
- Web.config File Minification
- Demo:Web.config File
- Extensible Output Caching
- Demo:Output Caching
- Auto-Start Web Apps
- Shrinking Session State
- URL Routing
- Demo:URL Routing
- Summary

Web Forms
- Introduction
- Web Forms
- Setting Meta Tags
- Demo:Meta Tags
- Control over ViewState
- Browsers/Devices Support
- Predictable Client IDs
- Demo:Client IDs
- Persistent Row Selection
- Demo:Persistent Row
- Filter Data w/QueryExtender
- Demo:QueryExtender Control
- ASP.NET Chart Control
- Demo:ASP Chart Control
- Summary

Deployment
- Introduction
- Web Application Deployment
- New Deployment Features
- Web Packaging
- Web.Config Transformation
- Database Deployment
- One-Click Publishing

(Continued on page 2)

Exploring Visual Studio 2010 Using Visual C#

- Demo:Deployment Features
- Demo:Create Configuration
- Demo:Examine Configurations
- Demo:Connection String
- Demo:Create Transformation
- Demo:Perform Translation
- Demo:Create Package
- Demo:Deploy Package
- Demo:Perform Deployment
- Demo:Check Results
- Demo:Browse Website
- Summary

Introduction to Workflows
- Introduction
- Windows Workflow Foundation
- Rethinking Applications
- Wouldn"t It Be Great If
- You"re in Luck
- Workflow 4.0
- Activities: Workflow Controls
- Data Flow
- Demo:Workflow
- Summary

Activities and Hosting
- Introduction
- Flow Control Activities
- Runtime/Primitives Activitie
- Other Activity Groups
- Demo:Control Activities
- Workflow Architecture
- Kinds of Host Applications
- WorkflowInvoker
- WorkflowApplication class
- Demo:WorkflowApplication
- Summary

Custom Activities
- Introduction
- Custom Activites
- Why Custom Activities
- Base Activity Classes
- Demo:Activity Library
- Demo:Custom Activities
- Demo:Compsite Activity
- Summary

Configuration Improvements
- Introduction
- WCF Building Blocks
- Endpoints Explained
- Bindings Explained
- WCF Provided Bindings
- Hosting a WCF Service
- Defining Endpoints
- Service Config Improvements
- Demo:WCF Service
- Demo:Host Application
- Demo:Test Host
- Demo:Default Endpoints
- Demo:Configure Bindings
- Demo:Self Host
- Demo:Multiple Protocols
- Demo:Client App
- Summary

Service Discovery
- Introduction
- Service Discovery
- Demo:WCF Discovery
- Demo:Discovery-Host
- Demo:Discovery-Client
- Discovery Announcements
- Demo:Discovery
- Demo:Config Announcements
- Summary

Data Binding
- Introduction
- New Controls in WPF
- DataGrid Control
- Data Binding
- Demo:Data Binding
- Demo:DataGrid
- Demo:Using Resource
- Demo:Create Converter
- Summary

Designer
- Introduction
- WPF / Silverlight Designer
- Demo:Create/Edit Resources
- Demo:Examine Properties
- Demo:Edit Gradients
- Demo:Edit Fonts
- Demo:Work Styles
- Summary

Calendar / DatePicker
- Introduction
- Calendar Control
- DatePicker Control
- Demo:Calendar Control
- Demo:Blackout Dates
- Demo:Change Scaling
- Demo:Viewbox Control
- Demo:DatePicker Control
- Summary

Visual State Manager
- Introduction
- Visual State Manager
- Easing Functions
- Demo:Easing Functions
- Demo:Visual State Manager
- Demo:Event Handlers
- Demo:Easing Function
- Summary

Silverlight
- Introduction
- Silverlight
- Why Silverlight?
- Evolution of Silverlight
- Silverlight 3.0
- SIlverlight Development Tools
- Getting Started
- Silverlight Layout
- Demo:Simple Project
- Demo:Cross Browser
- Demo:Sample Calculator
- Demo:Event Handler
- Demo:Debug Code
- Demo:Layout Grid
- Summary

Silverlight Media
- Introduction
- Video / Audio
- Demo:MediaElement
- Out of Browser Support
- Demo:Out of Browser
- Summary

Navigation
- Introduction
- Silverlight Navigation App
- Navigation Framework
- Demo:Navigation Template
- Demo:Add Content
- Demo:Modify View
- Demo:Create View
- Summary

Silverlight Data
- Introduction
- Working with Data
- Binding Data
- Demo:Binding Data
- Summary

Entity Framework
- Introduction
- Entity Framework
- Entity Data Model (EDM)
- Entity Framework Components
- ObjectContext Class
- Entity Class
- Relationships
- Stored Procedures
- Create Entity Data Model
- New Entity Framework 4
- Demo:Entity Data Model
- Demo:Model Browser
- Demo:Add"l Entities
- Demo:Stored Procs
- Demo:Import Stored Procs
- Demo:DB from Model
- Demo:Generated Code
- Summary

LINQ to Entities
- Introduction
- Querying with LINQ
- LINQ to Entities
- Demo:LINQ to Entities
- Demo:Simple Queries
- Demo:Scalar Functions
- Demo:Aggregate Functions
- Demo:Query Entities
- Demo:Lambda Expressions
- Demo:Grouping
- Demo:Joins
- Demo:Modifying Data
- Demo:Related Data
- Demo:Stored Procedures
- Summary

ADO.NET Data Services
- Introduction
- ADO.NET Data Service
- REST
- REST Principles
- Why REST vs SOAP
- ADO.NET Data Services
- Demo:Data Service
- Services from Clients
- Demo:Calling Data Services
- Summary

Working with Lists
- Introduction
- SharePoint 2007
- SharePoint 2010
- Project Templates
- Item Templates
- List/Content Types
- List Definitions/Instances
- Create a List
- Demo:Create List
- Demo:List Manually
- Demo:Custom Columns
- Demo:Content Types
- Demo:Define FieldRefs
- Demo:List Definition
- Demo:Edit ViewFields
- Demo:Build/Deploy
- Event Receivers
- Create Event Receiver

(Continued on page 3)

• Demo:Event Receiver
• Summary

Working with Data
• Introduction
• Web Parts
• Query Data from Server
• LINQ to SharePoint
• Create Visual Web Part
• Demo:Visual Web Part
• Demo:SPMetal
• Query Data from Clients
• Client Object Model (COM)
• Retrieve Data with Load
• Retrieve Data with LoadQuery
• Load vs LoadQuery
• Retrieve List Items
• Modify List Items
• Demo:Client Object Mod
• Demo:Complex Client Object
• Summary