

Core Windows Forms Technologies with Microsoft Visual Studio 2005

Workshop 2546: Three days; Instructor-Led

Introduction

This three-day instructor-led workshop provides students with the knowledge and skills to develop Microsoft(Windows(Forms applications using Microsoft Visual Studio(2005. The workshop focuses on user interfaces, program structure, and implementation details.

Audience

This workshop is intended for corporate or independent software vendor (ISV) application developers who have a desire to learn more about specific technology areas in Windows application development.

Objectives

After completing this workshop, students will be able to:

- Create a simple Windows Forms application.
- Configure standard controls.
- Build menus.
- Display and edit data by using data-bound controls.
- Provide user assistance and enhance usability.
- Create consistent applications by using dialogs and forms inheritance.
- Add print and report functionality to a Windows Forms application.
- Perform asynchronous tasks by using the BackgroundWorker component.
- Deploy a Windows Forms application by using ClickOnce.

Prerequisites

Before attending this workshop, students must:

- Be able to manage a solution environment using the Visual Studio 2005 integrated development environment (IDE) and tools
- Understand Microsoft .NET Framework 2.0 and the Common Language Runtime
- Be able to program an application using a .NET Framework 2.0 compliant language
- Know how to make assemblies available to other applications
- Have a basic understanding of XML, including XML declaration, elements, attributes, and namespaces.

Course Outline

Unit 1: Creating a Simple Windows Forms Application

This unit introduces the fundamental skills required to create a simple Windows Forms application. It explains how to configure form properties and how to add controls to a form. It also deals with events and explains how to create event handlers at design time and run time.

Unit 2: Configuring Standard Controls

This unit introduces many of the controls from the Visual Studio Toolbox. It teaches how to add and configure these controls and explains how to group them into different categories by function.

Unit 3: Building Menus

This unit introduces the MenuStrip control and the ContextMenuStrip component. It explains how to create and configure form menus and context menus in an application. It also deals with the ToolStripItems that can be added to the container of a MenuStrip or ContextMenuStrip.

Unit 4: Displaying and Editing Data by Using Data-Bound Controls

This unit introduces the controls that can be used to display data from a data source. It shows how to use Visual Studio 2005 to create data sources and add data-bound controls to a form. It also demonstrates how to use the DataGridView control to display and update data retrieved by using a data source.

Unit 5: Providing User Assistance and Enhancing Usability

This unit introduces many of the controls and techniques that can be used to create an application that is flexible and intuitive and that provides timely feedback to the user. It shows how to add and configure the available user assistance controls to provide ToolTips, Help, and information about errors. It also describes the accessibility features of Windows Forms and explains how to implement globalization and localization in an application.

Unit 6: Creating Consistent Applications by Using Dialog Boxes and Forms Inheritance

This unit introduces the built-in dialog boxes that can be used to prompt users when they are performing common tasks and to provide users with a familiar interface. It explains how to add and configure dialog boxes that enable users to open and save files and to set font and color properties. This unit also explains how to create and use a custom dialog box. In addition, this unit explains the concept of forms inheritance and describes how to create a consistent interface for Windows Forms applications.

Unit 7: Printing Content and Creating Reports

This unit provides an introduction to the components that can be used to preview and print reports from a Windows Forms application. This unit covers the predefined dialog boxes that simplify the processes involved, and it explains how to use these dialog boxes to retrieve print settings and page setup options from the user.

In addition, this unit explains how to display a report in a Windows Forms application by using the CrystalReportViewer component

Unit 8: Performing Asynchronous Tasks by Using the BackgroundWorker Component

This unit introduces the main concepts of asynchronous programming and then focuses on the BackgroundWorker component. It explains how to work with the methods and events of the BackgroundWorker component to add asynchronous functionality to a Windows Forms application.

Unit 9: Deploying Applications by Using ClickOnce This unit explains how to deploy a Windows Forms application by using ClickOnce. It covers the steps required to prepare, publish, install, and test an application. Finally, this unit explains how to update an application and how to use the automatic update feature of ClickOnce.