

.NET GUI Development with WinForms

Audience Course .NET GUI Development with WinForms

The course .NET GUI Development with WinForms is intended for C# developers who want to develop web applications based on WinForms.

Prerequisites Course .NET GUI Development with WinForms

To participate in the course, knowledge of Web standards such as HTTP and HTTPS is desirable and knowledge of the fundamentals of C# are required.

Realization Training .NET GUI Development with WinForms

Theory and practice are alternated in the course. Explanations using slides and demos are followed by practical exercises.

Certificate .NET GUI Development with WinForms

After successfully completing the course, participants receive a certificate of participation in .NET GUI Development with WinForms.



Content Course .NET GUI Development with WinForms

In the course .NET GUI Development with WinForms participants get hands-on training in building desktop applications using Windows Forms. Participants will learn to design and implement graphical user interfaces, handle user input, and manage controls dynamically. The course also covers topics such as event-driven programming, data binding and the integration of WinForms with databases.

Intro WinForms

The course .NET GUI Development with WinForms starts with a discussion of the structure of WinForms projects and the desktop layout in Visual Studio. The application class and the Windows Forms designer are also discussed.

WinForms Fundamentals

Then the fundamental elements of WinForms applications such as menus, panels, controls and the status bar are covered. And event handling is also treated.

Libraries

Next attention is paid to reusable libraries in .NET WinForms applications and how their assemblies are referenced in projects. The data collection classes and other class libraries are covered.

Controls

In the GUI interface of WinForms applications, many controls are used that allow users to perform interactions. Discussed are buttons, text boxes, check boxes, radio buttons and list boxes as well as the associated events.

Dialogs

The many ready-made dialog windows from the WinForms library are then treated, including various message boxes and the common file dialogs OpenFileDialog and SaveFileDialog. The difference between modal and modeless dialogues is also discussed.

Views

Views make up the user interface in WinForms applications. Attention is paid to various standard views in WinForms such as the Tab Pages view, the List view, Tree view and Grid Views.

Drawing and Scrolling

Next it is explained how images can be drawn and displayed in WinForms applications and how scrolling of views with scroll bars can be implemented.

MDI Forms

Both Single and Multiple Document Interfaces (MDI) interfaces are covered. And attention is paid to MDI child forms.

Data Binding

Finally, data binding is discussed, in which the contents of user interface elements, such as a data grid, are linked to the values of variables in the application. Database connectivity with ADO.NET, SQL and LinQ is covered as well.

Locations



Modules Course .NET GUI Development with WinForms

Module 1 : Intro WinForms	Module 2 : WinForms Fundamentals	Module 3 : Reusable Libraries
Intro WinForms and .NET	Menu Class	Data Collection Classes
C# Primer	Menu Bars	Interfaces
Namespaces and Classes	Main Menu	Class Libraries
Constructors and Methods	Click Events	Referring Assemblies
Application Class	Adding Handlers	ICollection Interface
Visual Studio IDE	Popup Events	IList Interface
Program Execution	Context Menu's	Object Class
AssemblyInfo File	Control Class	Overriding Methods
Creating Forms	Status Bar Class	Disposing Resources
Controls and Events	Owner Drawn Panels	Exception Handling
Desktop Layout	Drawltem Events	Finally Blocks
Module 4 : Controls	Module 5 : Dialogs	Module 6 : Views
Labels and Text Boxes	Message Boxes	Tab Pages
Form Inheritance	OK and YesNo Dialog	Tab Control
Button Classes	Form.Close Method	ListView Class
Radio Buttons	Modal Dialogs	Populating Columns
Check Boxes	Modeless Dialogs	Editing Columns
List Boxes	Common File Dialogs	Item Activation
Combo Boxes	Multiple File Selection	TreeView Class
Calendar Control	Files and Paths	Splitter Class
Mouse Events	Save File Dialogs	Dynamic Tree Nodes
Keyboard Events	Open File Dialogs	Node Selection
Module 7 : Drawing and Scrolling	Module 8 : MDI Forms	Module 9 : Data Binding
Image Drawing	Interface Styles	Data Grids
Image Menu	Single Document Interface	Editable Objects
Stretch to Fit Option	Multiple Document Interface	Simple Data Binding
Scale to Fit Option	Explorer Interfaces	Data Grid Customization
Repainting	MDI Forms	IEditableObject Interface
ScrollableControl Class	MDI Child Forms	Database Connections
Automated Scrolling	Merged Menu's	Connection Strings
Scrolling Properties	Child Window Management	SQL Command Object
Panels	Replacing the Toolbar	Using ADO.NET
Status Bar Panel	Updating Title Bar	LinQ versus SQL